



THE MACMILLAN COMPANY

NEW YORK . BOSTON . CHICAGO . DALLAS
ATLANTA . SAN FRANCISCO

MACMILLAN & CO, LIMITED

LONDON . BOMBAY . CALCUTTA
MELBOURNE

THE MACMILLAN COMPANY
OF CANADA, LIMITED
TORONTO

THE SOUL COMES BACK

BY
JOSEPH HERSCHEL COFFIN, PH.D.

PROFESSOR OF PHILOSOPHY
WHITTIER COLLEGE



NEW YORK
THE MACMILLAN COMPANY
1929

COPYRIGHT, 1929,
By THE MACMILLAN COMPANY.

Set up and electrotyped.
Published March, 1929.

All rights reserved, including the right of
reproduction in whole or in part in any form.

SET UP BY BROWN BROTHERS LINOTYPERS
PRINTED IN THE UNITED STATES OF AMERICA
BY THE CORNWALL PRESS

CONTENTS

PART I

THE STAIRWAY OF THE SOUL

CHAPTER	PAGE
I. CAN THE STORY BE TOLD	9
II. WHAT THE MATERIALIST SEES	22
III. WHAT THE MATERIALIST DOES NOT SEE	31
IV. TENACIOUS TRADITIONS	41
V. THE EMERGENT SOUL	50
VI. THROUGH THE EYES OF A MODERNIST	59
VII. THE STAIRWAY OF THE SOUL	70
VIII. THE STAIRWAY OF THE SOUL (<i>continued</i>)	83

PART II

A SOUL FOR JOHN DOE

IX. DOE'S PSYCHOSOMATIC CAREER	103
X. ORGANIZING A SOUL	121
XI. ORGANIZING A SOUL (<i>continued</i>)	131
XII. THE HYGIENE OF THE SOUL	146
XIII. THE HYGIENE OF THE SOUL (<i>continued</i>)	158
XIV. DOE'S DESTINY	179
XV. FAITH VERSUS AGNOSTICISM	192
XVI. WHAT IT WAS ABOUT	203

PART I
THE STAIRWAY OF THE SOUL

THE SOUL COMES BACK

I

CAN THE STORY BE TOLD?

AN acquaintance of mine floats about in the margin of memory because of the nonchalance with which he deals with certain serious and solemn questions. Comments on life and death, God, and immortality are bandied about by him in an offhand manner that seems a bit shocking, and all the more so because the man is well along in a fatal disease. If you should feel as I do concerning his inconsequential chatter about the details of his regimen you would follow him in awed silence as he weaves into it his ideas about origins and destinies, rewards and punishments, truth and falsity. Very likely you would decide he is just a plain degenerate.

On mature consideration, though, you would suspect, if I am not mistaken, that his flippancy is but a feint to distract your attention from his passionate longing for insight as he drifts toward the great adventure into these mysteries. Afterwards you might undertake to dismiss the matter with the observations that the man is abnormal; that his physical condition has produced a mental twist that makes him ashamed to deal with reality like a gentleman; that he feels he must per-

force caper and cavort thus on the brink of the jumping-off place for fear people will think him a coward and a poor sport. You would pity him and cudgel your imagination for items of comfort for him.

Perhaps abnormality is the reason; perhaps he does have a fear complex. But does this argue that the absence of these yearnings for insight would be a sign of healthy-mindedness? May it not be that his condition simply throws up to the surface a set of questions which are normally present below in every mature mind? The social molecules called persons which make up the Public are every one characterized by a kind of life called self-consciousness, whose essence is to interpret, evaluate, and execute. We all read newspapers, magazines, and journals of opinion; we listen to phonographs and radios; we work and try to get on. The take-off for every one of these activities or functions is some kind of a contract with the universe—standpoint, the philosophers call it. Perhaps the difference between my friend and the rest of us is that he persistently makes these questions part of his daily schedule by injecting them into the régime of his medicine-taking, whereas the rest of us act upon standpoints implicit rather than explicit, and postpone a rationalization of them until the doctor wears a path to our own door.

And yet this is not quite true either; at least it is not the whole truth. For most of us have at odd times and from various sources and materials pieced together some kind of picture of the universe. Popular mechanics, newspaper science, Sunday-school theology, business ethics, movie esthetics have all supplied the building materials of our intellectual structures if we have not had access to the finer stuffs of genuine science

and philosophy with which to build. Being what we are—rationalizing persons—we normally must philosophize, each in his own way and at his own time.

Were you to try to gather together all the problems of reality and the mysteries of existence into one strand, you could do no better than to look at your own image in the mirror. For human personality epitomizes the whole cosmos. If you are a physicist, perhaps you think electrons are elusive; or if a chemist, perhaps that bio-chemical processes are intricate. To a physician the nervous system and the glands of internal secretion are potent and puzzling; to a psychologist personality is a most complicated stimulus-response mechanism; to an educator personality is a growing thing and requires the subtlest kind of horticulture; to a minister a certain part of personality—the soul—is the pinnacle of the universe. And indeed all these men are correct; for personality is a synthesis of electrons, bio-chemical processes, nerves, glands, reactions, and soul. This is why I say personality epitomizes the cosmos. And soul is on top of the heap. The analysis of a vitamin is child's play in comparison. Consequently a measurable understanding of this pinnacle of reality—soul—would go further toward explaining the whole mystery of the universe, life, death, and the forces and laws that operate them, than anything else under heaven.

But the moment one tries to unravel this all but inextricable story, one is halted by the questions: What are your sources of knowledge of the soul? What assurance have you that your version of it is correct? Indeed, how can anyone be sure he knows anything of it? How can one know anything at all for certain? And I am not insensible of the momentousness of the

undertaking or of the intellectual courage necessary for the planning of such an epic.

I am reminded of another friend of mine who claims to be an agnostic. He would simply laugh at the enterprise and assure me that my efforts are likely to accomplish nothing except to add to the existing confusion. For he holds that the only defensible position regarding this question of the soul as well as a host of other enigmas is straight-out agnosticism. And in that case the less said about the matter the better.

In order that you may see the logic of his position, and at the same time appreciate the hardihood of anyone who would attempt the difficult task of stalking the soul of John Doe through its career to its destiny, suppose we consider his argument a moment.

How Can One Know?

To begin at the beginning, Allen insists that all the talk about materialism, idealism, fundamentalism, mysticism, etc., is only milling round in a circle and gets nowhere. At least not until one has made some inquiry into the ability of the human mind to know the truth. The materialist thinks materialism is true, the idealist thinks idealism is true, and their views are all different and probably contradictory. Therefore they cannot all be true, and very likely none of them is.

So the bed-rock question is, How are you going to know the truth about the soul or anything else?

Theories in answer to this fundamental problem are not wanting, avers Allen—at least some of them may be dignified by the name theory, even if not all are worthy of so complimentary a title. There is the traditionalist, for example, who probably holds no *theory* about what is true, but who nevertheless knows with

unshakable certitude what is true and what is not. Evidence means nothing to him and his mind is impervious to conviction. The old revival doggerel pictures his state of mind:

'Tis the old time religion
'Tis the old time religion
'Tis the old time religion
And it's good enough for me.

It was good for Paul and Silas
It was good for Paul and Silas
It was good for Paul and Silas
And it's good enough for me.

One might substitute politics, or style, or custom, or morality, or business methods, or anything else for "religion," and still be a traditionalist. So long as it is old it is O.K.; any new-fangled idea or thing is taboo. Whatever was good for my fathers is good enough for me.

Then there is the theory that truth—all the basic truths about the origin and mechanics of the world, the nature and origin as well as destiny of humankind, including moral codes, principles of conduct, and eternal salvation—all the major premises of truth—was revealed once for all in the Bible. Anything which does not accord with a literal interpretation of the Bible is heinous heresy. Close to this theory is the more venerable one that the Church is the custodian of all truth, secular as well as sacred. The height of presumption would be for any mere individual to set up his own puny opinion against the final deliverances of this divine institution. This is the position of the devotees of authority. This view may also operate in affairs of state and of government as well as in affairs of religion, or in matters of social theory or business

methods as well as in matters of the spirit. That which the higher-ups decree is true is the truth, say the apostles of authority.

Then there is the doctrine of empiricism. The empiricist argues that the only thing he is willing to believe and accept is what he can see or hear, or what comes within the range of his own personal experience. The empiricist says, "It is going to rain to-morrow." You ask him why he thinks so and he replies, "Because the sky was lowering at sunset." You inquire what that has to do with it and he responds, "I do not know, but it usually does rain after a sunset like that." This sounds feasible, and the empiricist has collected a great amount of valuable knowledge on the basis of his experience. The only trouble is that he knows so horribly many things that are not true; such, for example, as that thirteen is an unlucky number or that you ought to plant your potatoes in the dark—or the light, whichever it is—of the moon.

The intuitionist is so very sensible of the absurdities to which the empiricist is led that he goes to the other extreme and insists that the senses are deceptive and no sure source of truth. Truth is planted in the mind itself like a seed and furnishes the starting-point in all true knowledge. Everybody knows intuitively that the whole is greater than any of its parts, or that a straight line is the shortest distance between two points. No need to try to prove these things—they are self-evident! Here then is the starting-point, and we have but to deduce and infer from these and other basic premises what is true. The detective with his observations, inferences, and deductions is the best example of how this point of view operates.

Finally, there is the so-called scientific method,

which relies upon experimental observation and deduction. This is doubtless the most reliable and effective method so far devised by man of arriving at the truth. But look at the history of science—one discarded theory after another. One generation of scientists throws over the theories of its predecessors and sets up something else which will suffer the same fate at the hands of those who follow. Every man claims finality for his view, but nothing is final. Here we are, the human race which has been here a matter of 500,000 years or better—Allen is an evolutionist; but what right has Allen, an agnostic, to hold the theory of evolution? And look at the feeble and futile and puerile and self-contradictory accumulation of knowledge we have been able to get together. Truth is as far away from us as ever; when we come to evaluate what we suppose we know, its value is precisely—zero!

So, Allen repeats, there you have the net result of all our theories about how to arrive at the truth. Hume was the wisest of all men because he admitted frankly his inability to know anything for certain; and this is the position we ought all to take. It would save us incalculable wear and tear if we would not take ourselves and our little problems so seriously. Take life as it comes; an emotional stew about fundamentalism or modernism is not only gratuitous but futile. The question cannot be settled either by scientists or theologians, much less by legislatures, simply because it is beyond the ability of finite mind to know.

The Business of Faith

Rather interesting how ready Allen is to shove a question mark into the face of the human soul and of God and all the so-called values of life, and leave it

there without lifting a finger to get an answer to his question. And yet, how ready he is on the other hand to think in terms of evolution and scientific formulas, and to utilize the results of science and mechanics as he gets up by an alarm clock, eats a patent breakfast food, drinks coffee from the percolator, reads books printed on a modern printing press, and writes out his negative philosophical patter on a typewriter.

Being consistent and agnostic at the same time is a pretty stiff proposition. Bigger men than Allen have tried and couldn't make a go of it.

Here is how an agnostic ought to react:

"Is there a God?"—"I don't know."

"Have you got a soul inside of you?"—"I don't know."

"Are two things that are equal to the same thing equal to the same thing?"—"I don't know."

"Are you hungry?"—"I don't know."

"How are you going to find out?"—"I don't know."

"Have you got a job?"—"I don't know."

"What is your name?"—"I don't know."

"What are you going to do about it—just sit here?"—"I don't know."

Now if you should meet a man like that you would know you had discovered the only living agnostic; and he wouldn't be living very long. But the man who claims as an agnostic to deny the existence of God, freedom, and immortality, the possibility of mathematical or scientific or historical knowledge, and at the same time goes on acting and living *as if* he knew that life is worth living, *as if* he knew the sun would rise to-morrow, *as if* he knew his six dollars per day wage would buy food that would satisfy hunger, that would

keep him in health and strength, that would give him joy and satisfaction—as I say, a man like this has only succeeded in being self-contradictory.

The fact is, thorough agnosticism is impossible. Life simply cannot go on on the basis of agnosticism. Suicide by *inaction* is the only possible end of the agnostic.

Now I am perfectly willing to admit to my friend Allen that all knowledge is more or less hypothetical; that the thing we call our system of knowledge is founded upon certain far-reaching assumptions, such as time and space and matter (or energy) and mind and self-consciousness and world purpose, and the like, and that the given principle is true provided certain other things are true. When he says to me, for example, "How do you know the sun will rise to-morrow?" I tell him that if the universe hangs together that much longer I know it will. Of course the *if* is hypothetical. But unless time and space and energy and natural law and divine consciousness should explode and go out of existence, shatter into nothingness, between now and then, I know the sun will rise. Now if you want to sit here and hold your breath waiting for the catastrophe it is all right with me, I tell him. But as for me—business as usual; I am going to operate upon the assumption—the hypothesis, if you please—of the constancy of the universe, with its system of laws which control sunrises and everything else.

Faith is the only possible basis for living; not simply religious faith, but faith in the universe (which includes religion); faith in God and in the constancy of the natural order, faith in humanity, and faith in self. Call it faith in the hypothetical if you wish; but positiveness in life is achieved only in this way.

And when it comes to that question as to how we are going to know the truth, we must have faith in our own ability to know!

We must certainly admit again that no one of the methods men have used in their effort to get knowledge, nor all of them put together, has resulted in our omniscience yet. But we refuse to admit that the net result of our effort to date is zero, as Allen insists. One is astounded at the tremendous findings of the human mind within the last minute of the incredibly long period of human history. In the discovery of the historical and scientific methods we have only just now hit upon the true procedure; and any healthy mind must have unbounded faith in the ability of the human race to gain insight into the world of nature and mind and to control both for the sake of human welfare and happiness.

You can lead a horse to water but you cannot make him drink. Allen admits the plausibility of my criticism and still he declines to commit himself. When it comes to any crucial question—say, that of soul—he still hesitates. He wants to know what you mean by soul; what constitutes evidence; what evidence there is, after the term has been defined.

But in the face of these questions and in spite of the difficulties, the problem of soul keeps pressing upon us; the riddle of the universe still challenges us. To meet the situation, almost everyone has some sort of philosophy of life—and death—but too frequently our philosophies are biased or prejudiced; or if not that, then just one-sided or inadequate. The problem of soul, like all others, needs to be the center of a circular approach. To view it first from one point of view and then another until we have made the

circuit cannot but be helpful, particularly if we will take our stand sympathetically in turn by the side of every scientist or philosopher who has a prominent vantage-point. For example, to get the picture of the soul as seen by the naturalist, the historian, the psychologist, the sociologist, as well as the religionist, ought to give us data from which to synthesize a possible concept. In my work as a teacher of philosophy it has been my pleasure to discuss this problem with every variety of person: with people of "background" and those having none; with those of deep religious biases and prejudices and those having no religious presuppositions at all; with those of materialistic leanings and those of poetic feelings; with the intellectual type and with the sentimentalists.

So if I use typical acquaintances as illustrations in this effort to make a circular approach to the problem of soul, it is because the recalling of their personalities and the cogency of their attacks makes the analysis the more incisive in my own mind. And if this were a preface, where it would be suitable to do so, I would acknowledge the deep debt I owe these individuals for the degree of satisfaction that has come to me as they have led me about the circle, criticizing and challenging at every step. Of course I have read books—a lot of them; but I submit that the best place in the world in which to get an education is in a college classroom—provided you are the teacher, and provided, further, that you have the nerve not to do all the talking.

As we have asked ourselves again and again what is the true, the good, and the beautiful; as we have inquired over and over what the fundamental values in our world of "wind and weather" and of spirit

are, the answer always falls somewhere in the neighborhood of personality and its essence.

Perhaps there was a time not so very long ago when soul went out of fashion. Scientists and philosophers may have been a bit afraid of appearing out of date if they even used the term "soul." For example, one very estimable psychologist writes in the first paragraph of his psychology book that "psychology is the science of soul in its original derivation." But no further reference to soul is to be found in the book until you come to the index.

Again, perhaps the psychological tweezers of the experimentalist had so far divided and laid out part by part the structures of the mind that the fundamental unity of it was obliterated. Our analytic zeal and our passion for elements played us the trick of leading us clear past the point from which the organicness of mind could be seen. Or we got headed always toward the periphery of experience instead of its center where the synthesizing is done.

At any rate the soul has not simply been denied; it has been ignored, which is worse.

But sometimes common sense leads closer to the essence of things than learned metaphysics; and when vigorous minds unspoiled by the scholastic dialectic or the super-refined methodology of the savant approach the basic issues of life they often come with curious directness to the heart of the problem and see with surprising clearness. At all events, prevailing styles in metaphysical vestments mean little to them, and they very simply and naturally revert to the home-spun concepts and points of view which have carried the dominant values through all the centuries of our civilization.

Among these concepts soul is central.

The discourse in an informal philosophy class unhampered by a rigid syllabus will sooner or later gravitate toward this problem. Happily, too, the new humanism in philosophy and psychology is swinging back to this problem and others of the same family. At least three of the most admirable of the recent introductions to philosophy deal sympathetically and adequately with the problem, while one wing of the psychology contingent is definitely flirting with the concept.

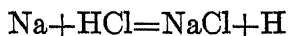
So the soul is coming back.

II

WHAT THE MATERIALIST SEES

This Mechanical World

HARBIN is a senior in college; he is majoring in chemistry. To him the universe is a vast material mechanism made out of chemical elements which attract each other, repel, combine, break up, and recombine in almost infinite varieties of patterns according to the inexorable laws of chemistry. There is no mystery about it; only analyzable intricacy.



is the formula for the whole world process reduced to its lowest terms.

More specifically, reality is the sum total of the whole list of chemical elements from antimony to zinc, each atom serving as the medium by which the various forms of energy such as light, heat, and electricity may stage their cosmic drama. Of course we may discover later—in fact we seem to be discovering now—that these different elements and forms of energy are after all reducible to one kind of energy—say, electricity. But however this may be atoms are atoms, whether simple or complex, whether infinitesimal pieces of “matter” or centers of energy like electrons.

In any case they are the bricks out of which the

universe is built; in whatever terms defined they are massed together in various combinations to make rocks, soils, ores, water, and air and serve as the agencies through which energy operates to produce all the phenomena with which we are familiar in nature.

The big-scale movements of sun, moon, and planets are as mechanical as those of your wrist watch, the sole difference being that the astronomical universe is as much more perfect, reliable, and immutable than your watch as it is more immense. The endless cycles of weather too are as orderly and necessary as the movements of the hands of the watch, if we but saw all of them. Rain, brooks, rivers, oceans, evaporation and clouds, wind, condensation, followed by more rain, constitute a never-ending causal series. Also rain, brooks, rivers, erosion, silt deposits, crust depressions, upheavals, new mountain ranges, new river systems, succeeded by more erosion, constitute another interlocking mechanical cycle—the geologic.

So Harbin is a materialist and a mechanist. The most elementary acquaintance with natural science leads to this conception, and there is no alternative, he thinks, but to build your philosophy of life upon the solid foundation of such knowledge.

The kind of philosophy one has depends upon the kind of man one is, once said a great philosopher. He might have been more specific and asserted that the kind of philosophy one has depends upon the kind of habits of conduct, and the kind of emotional and intellectual attitudes one has, and that these depend upon one's background. Harbin is a glorious if not an illustrious example of the truth of this principle. For his life has been a continuous combat with very material forces for very material ends, including food,

shelter, and clothing and such poor pleasures as do not cost too much. Religion for him is superstition—not to go as far as to say a nice, soft graft; morality=expediency; and education is a technique that enables the possessor to get on in the world without hard labor.

From this description you may gather that he is largely lacking in that elusive thing known as "background." His family was too much absorbed in the enterprise of nutrition and gestation to have any time for the finer values of life, even if they had the interest. Besides there was too much spiritual ammonia in the atmosphere around him.

So, with his "scientific" predisposition and his deficiencies in certain other essential predisposing factors, Harbin insists upon being rigorously consistent clear through to the end—which would work nicely, of course, were he in possession of all the facts and values of life. While all of us would be willing to go at least a certain distance with Harbin, there comes a point at which most of us insist upon bringing in some other principle of explanation besides matter, energy, and mechanism. For example, one might follow Harbin in what he says about the natural world—weather, erosion, mountain, river formation, and the like; but most people would likely insist that the freedom of the will, moral responsibility, consciousness, personality, immortality, etc., are crucial problems which can be fruitfully approached only by belief and faith in a God of purpose and power.

But not so for Harbin. This would be to cumber thought with so much gratuitous guesswork. As for him, he is a hard-headed, cold-blooded, matter-of-fact scientist who deals only with reality and is not interested in any finespun theories about God or soul or

immortality. These are unnecessary and therefore inadmissible concepts. Life, including "personality" itself, is only a "piece of chemical clockwork."

The Chemistry of the Soul

If you insist that mind or soul is a crucial problem that cannot be solved by the mechanistic formula, then listen to this challenge, says Harbin:

The soul of man is a complex problem, the most complex problem in physics and chemistry. The blood and the nervous system and the glands of internal secretion form the triumvirate of chemical machines whose integrated functioning is the soul. There is every reason for believing that life is a piece of chemical clockwork and its manifestations are the results of the sum total of the activities of the chemicals in living matter.

Harbin had been reading one of the latest books belonging to the fertile no-man's-land that lies between psychology and medicine, a book which attempts to find in the glands of internal secretion the scientific basis for an analysis of human personality.* In it he found the paragraph just quoted, and he showed it to me with a new light in his eye. For here was expert testimony of the order with which he was familiar. He appropriated it avidly because it buttressed his own philosophy of life and gave him a scientific instead of merely a speculative argument. Another euphonious sentence, which gave Harbin something of the esthetic and intellectual ecstasy that a sonnet might have aroused in Longman or a verse of Scripture in Miss Wilson, was this: "The chemistry of the soul is the chemistry of the cell." Altogether the book was carrying him rapidly along in the direction in which

* Berman *The Glands Regulating Personality*.

he was already headed, and the reading of it was a rich experience. . . .

With all of this new evidence in hand the logic of the situation, Harbin has decided, is now absolutely compelling. Scientific reasoning can lead to but one conclusion. But let us begin a little further back. When it comes to an analysis of living matter we find precisely the same line-up of chemical elements as our analysis of the natural world shows—the familiar hydrogen, nitrogen, carbon, and the rest—no new ones are to be found in the most rigorous analysis of living protoplasm. The same constituents therefore are only put together in a little different fashion to produce living organisms; and there is no more necessity for postulating any other principle or essence or entity in the life process of the amoeba than is already found in the familiar chemical processes in an apothecary's shop.

Consider also the colloids which are made up of carbon, hydrogen, nitrogen, sulphur, phosphorus, and iron in certain combinations. Colloids the chemist can synthesize in the laboratory; he can even make them behave in some respects like particles of living protoplasm. When he begins at the other end by breaking down protoplasm he discovers that this mysterious essence of living tissue—protoplasm—is made up of these same elements; in fact that protoplasm is itself one of a number of colloidal substances. So Harbin feels it justifiable to put the two things together and extend the principles of chemistry to cover not only the behavior of atoms and electrons in inorganic matter, but the behavior of these same types of atoms in organic matter as well. Indeed he finds not at all two kinds of matter, inorganic and organic, but one

continuous series of chemical substances put together in ever more and more intricate and unstable combination. In short, life is simply a piece of "chemical clockwork."

Mental Clockwork

But if tissue-forming life is only chemical clockwork, then why not *mental* life? In fact are not some of the psychologists (the Behaviorists) talking of mentality in terms solely of reaction? Stimulus-response psychology is nothing more than the carrying forward of the same chemical concepts as a method of accounting for instincts and habits and associations and memories and all the other so-called mental processes. Here the chemical processes go on in the nervous system. What is sight, for example, but the action of light upon a photochemical substance in the retina of the eye? The chemistry of the neurone is the chemistry of the idea.

And if mental life is but chemical clockwork, then why not *social* life? Just one clock stimulating and reacting upon other clocks.

And if social life, then why not *spiritual* life also? Simply more mental clockwork. So with economic, political, esthetic, and moral life—all clockwork.

So it turns out upon analysis that the world of personality and society, of economics and morals, of beauty and religion is constituted of the same elements and energies as the natural order, and its operation is explained by an extension of the jurisdiction of the mechanism we have already discovered in the world of nature to cover these so-called "higher" types of life. This thing called soul which we had been thinking of as some kind of essence not definable in physical

or chemical terms is after all only the *function* of the bio-chemical process called life. And "God" and "righteousness" and "beauty" and the like are only ideas, which in turn are only *functions* of the nervous system.

So the universe is not so terribly complicated or mysterious after all; at least it is thoroughly understandable, and for that purpose only needs to be scientifically analyzed. Such analysis the physicist, the chemist, the biologist, and the psychologist can perform, each working in his own field. All that is then necessary is that the philosopher come along and take the findings of the several scientists and put them together into a complete picture of the whole. When you gaze upon the completed picture you see a pretty sizable, although probably finite "universe," made out of definite quantities of material operated by definite and describable energies according to definite and statable laws. A universe of clockwork all wound up and nothing to do but tick and tick. . . .

Call it materialistic mechanism or mechanistic materialism, whichever you choose. But terms of opprobrium Harbin refuses to consider them; rather do they name for him a perfectly reasonable, in fact the only rational philosophy of life. He agrees that of course he will have to go on like the rest of us using the words "soul," "wish," "motive," "aim," "purpose," "plan," "responsibility," "punishment," "freedom," "remorse," "aspiration," and all the others; but he will do so fully aware that there aren't any such things really, but that what are called by these names are just more clock ticks. To this day we all still say the sun "sets," although we know perfectly well the word does not describe for us what happens; never-

theless for the people who lived when the earth was universally believed to be flat and the center about which the heavenly bodies circled, it did accurately describe what happened. Similarly we shall continue to speak of a man's plans as if they were really causal factors in his actions although we shall be aware that in reality his conduct is but part of the operation of the machine. The chemistry of a nerve current is the chemistry of a deed of kindness.

Materialistic Mechanism

So I repeat, Harbin is a materialist and a mechanist; he is scientific to the hilt. He is not interested in this fundamentalist-modernist controversy—he says there is nothing to it. The modernist is right of course, at least in the things he denies; but why stir up so much dust about it? What difference does it make? Modernism butters no parsnips, and neither does fundamentalism, for that matter. The main thing is to get the parsnips—and the butter—for his body chemistry to work upon. Religion under whatever conception is only “sick men's dreams,” as Hume said. And the “values” for which religion pretends to stand are only puppets on the make-believe stage of consciousness. Instead of being causal factors in the world of human reactions, as is commonly supposed, ideas of “value” are in reality the results of natural forces. Instead of driving the engine they are like the escaping steam which is conspicuous for its noise but which is precisely not a causal factor in the progress of the engine. Moreover, your interest in “immortality” evaporates the moment you take the scientific view of the soul as the function of the bio-chemical process called life. “The chemistry of the soul is the chemistry of the

cell," and the one is immortal exactly as is the other, and in no other sense. . . .

Materialistic *méchanism*!

Here then is what the sheer materialist sees. The most you can say for soul is that it is function, a correlation with certain structures, just as digestion is the function of the stomach.

And how shall we appraise the theory? What is the answer?

You and I have too much respect for science to try to deny the bio-chemical analysis of life presented by Harbin. Perhaps he is correct after all; but perhaps he hasn't seen the whole picture. Perhaps he is correct in what he affirms but incorrect in what he (implicitly) denies.

III

WHAT THE MATERIALIST DOES NOT SEE

Immaterial Matter

LONGMAN is a mind of a different stripe. He begins with the proposition that if a string has one end it must have two ends, and if there is an up there must be a down. He says the trouble with Mr. Harbin's materialism is that he has looked at the bottom of the universe and does not even know it has a top.

Longman was quarter on the team this year. He earned the position not because he is particularly well fitted either mentally or physically for the job, but by sheer determination, to show the squad that he is no mollycoddle. He had the reputation of being a dreamer and a dilettante; he was supposed to be a bit too enthusiastic about literature for a regular fellow. Whether this is true or not, it is a fact that anything that smacks of materialism acts on him like a red flag on a bull.

To get down to cases, What, from the standpoint of common sense, is an orange? he asks. The materialist unhesitatingly answers that it is a mass composed of hydrogen, nitrogen, calcium, carbon, and several other chemical elements put together according to definite laws. And how is one aware of this mass, Longman inquires. Through the senses, of course, replies the materialist. Precisely! says Longman. And without

a mind as subject there could be no orange as object of knowledge. The chemical and physical properties of the orange have the power of stimulating certain sensations in us men. It is sweet, has a certain odor, is about so heavy, is cold, etc. Granting this to be the case then, continues Longman, the orange is for experience a group of sensations; for if we should subtract from the orange one after the other of its sensible qualities—its taste, its odor, its color and form, its weight and temperature—there would be nothing left of the orange. In short, as far as you are concerned the orange consists of a group of related sensations; for if all of these were taken away, no orange would be there.

But since psychology defines sensation as an elementary mental process of awareness the orange must be a complex mental process made up of elementary processes; in other words, an idea. And like the orange every object in the world is for you a complex of sensations and images and memories. The point is that the mind is the center of every man's world—the starting-point in his consciousness and his analysis of it. A man may be a skeptic and doubt the existence of God, the reality of the atom, the authority of law; but he cannot doubt his own doubting. He cannot doubt his own consciousness. Consciousness, mind, spirit, soul, whatever you choose to call it, is the foundation of every man's universe.

The materialist is like a man who says, "Everything that I can see is real, and nothing that cannot be seen has any existence." The eye—the organ of vision—cannot see itself (supposing there were no mirrors); hence the man denies the existence of his eye. The

idealist, on the other hand, is like the man who says, "While I cannot see my eye, yet I know it is there; for with it I see all the other things." My eye is for me therefore the basic reality of the universe.

This proved a totally new slant on the world for Harbin the materialist. It made it seem like one of those puzzle pictures; by concentrating at the right point you can see the hidden figure momentarily and then it slips back out of sight. It was exasperating not to be able to hold this new point of view before the mind long enough to examine it.

A Martian Visitor Views a Ford

Longman pressed the matter in this wise:

Henry Ford has accomplished the impossible by making his automobile plant wholly automatic. Man power has been entirely eliminated. No human eye is necessary as a guiding factor, and machines formerly directed and processes formerly accomplished by hand are now automatically executed. Raw material enters at one end of the plant and the finished product rolls out at the other end, complete to the last tack and stitch.

A man with a head for science, we will say, drops down from Mars into and moves as a fascinated spectator through this plant. The whole earth so far as he yet knows is a gigantic automobile factory. He is bewildered at the chaos of motion and noise. Fast-moving, endless-chain tables, ponderous cranes, lightning-speed presses, drills and hammers. Wires, bolts, rods, frames, glass, fabric, rubber and sheet metal are bent, beaten, welded, riveted, and stitched together to

a symphony of thuds, bangs, hisses, and whirs. Once every minute a finished automobile glides out mysteriously at the other end with uncanny precision and regularity.

Such a Martian visitor might sink down on a bale of fabric determined to think this thing through and understand it. He would demand of himself an explanation of this extraordinary experience; he must get some insight into the mêlée going on and discover the order and system which seems necessarily to obtain in this apparent chaos. He must have a philosophy of it.

Here are the results of his scientific investigations, set down in his characteristic way:

1. Materials used in Ford automobiles:

Cast iron, steel, sheet metal, copper, fabric, celluloid. . . .

2. Specifications for each car complete:

(Here follows a list resembling the invoice of a wholesale hardware firm.)

3. Machinery and equipment:

(Here an exact detailed description of presses, drills, molds, lathes, assembling plants, including every machine and apparatus in the plant.)

4. Methods of organization:

(1) Every machine automatic: self-lubricating; self-repairing. If anything breaks, machine goes right on turning and mends self at same time.

(2) Every machine autonomous; runs by law of own inner nature.

(3) All machines accurately timed and synchronized. If one speeds up, all speed up.

(4) Every machine acts as if it were intelligent; e.g. the machine that tunes the engine behaves as if it had sense. However its behavior is mechanical; no awareness.

(5) Operates under perpetual motion.

(6) Whole plant a majestic mechanism, very marvelous and intricate.

(7) While everything looks as if it must have been planned and set up for a purpose, no evidence is observable of any engineer, architect, or superintendent. Nobody of that sort is about. Whatever purpose there is in evidence seems to be resident in the materials and machines. The plant just turns out automobiles because that is its nature.

5. Conclusion:

The automobile is a complex problem, the most complex problem in physics and chemistry. The raw material, the machinery, and the power form a triumvirate of physical and chemical machines whose integrated function is the automobile. There is every reason for believing that the automobile is a piece of physico-chemical clockwork, and its manifestations are the sum total of the activities of the factors named.

That is Longman's answer to the claims made for mechanism. That Martian scientist worked out an hypothesis which accounted for all the facts observed, and every one of his findings was true from his point of view. By all the tests of science, therefore, his philosophy of the Ford is correct. But consider the things he did not observe and the things he did not do! If you take the trouble to make a list of them, you find

an impressive group of things the distinguished visitor did not take into account:

No question is raised by him as to the origin or source or nature of the raw materials.

No investigation is undertaken as to the history of the machines—who conceived the idea and invented them.

He did not take even a look outside the plant.

Did not visit the office of administration. Because he did not perceive an organizing personality walking about, he assumed there was none back of it.

Assumed material plant constituted whole works.

Never saw a Ford in operation outside plant.

Never questioned what its function is.

Mistook Ford plant for whole world.

Took whole thing for granted; never wondered why plant existed as going concern.

Now, argues Longman, the Martian scientist is a perfect specimen materialist and mechanist; and his glorified automobile factory is a very fair representation of the mechanist's conception of the universe. For when you analyze the mistakes he made, you find them to be precisely those habitually made by the materialist and mechanist.

In the first place, automobile factories cannot be made automatic to the extent the foreign observer supposed this one to be; machines cannot mend themselves, they cannot voluntarily coördinate their movements with other machines; perpetual motion does not exist; and purpose has to exist as a causal factor outside the machinery—not simply be resident in it. Now the mechanist makes exactly the same assumptions and mistakes in his attempted explanation of the natural world as a machine.

In the second place, the mechanist is correct in what he asserts, but absolutely incorrect in what he denies. This is because he mistakenly assumes that the physical plant constitutes the whole of the universe. He fails to hunt for and discover the administrative offices of the universe.

As a result the mechanist is unaware in the end of mentality or consciousness or soul as an executive and purposive, and therefore, as a causal, factor in the cosmic process. His eyes are glued to the materials and technique and the machinery of it. The trouble with the mechanist is that he takes account of but part of the universe, and the smaller part at that. His is the curious fallacy of the man who in trying to explain an automobile factory takes account only of the material stuff and natural laws and leaves out the most important factor, namely, the mind of the man who conceived it.

The Idealist's Contribution

By implication Longman's argument contends that if you can disprove the truth of materialism and mechanism, you have by the same token established the truth of idealism. This of course does not necessarily follow, although to succeed in proving the error of materialism would help clear the ground for idealism by its elimination of one of the many opposing philosophies. Someone has said a true philosopher is the man who can see big things big and little things little. The big thing which the idealist sees big is the world of mind and spirit, the world of beauty and goodness, while what he sees as little is the world of atoms and energy. The task which the idealist sets himself is therefore intrinsically more difficult than

that which the materialist sets himself, for the world which the idealist sees is much bigger and more intricate than that which the materialist sees.

So Longman refuses to believe that the "world of wind and weather" is self-created, an end in itself, or "the solely-aimed-at-structure" in the universe. He refuses to believe that the world is a great machine or that matter and energy in mechanism is an adequate principle of explanation. Least of all can personality be so accounted for. He insists that the one thing he cannot doubt is the existence of himself as a person and as a member of a society of persons. Psychology, sociology, ethics, are concerned with realities as basic as—yes, more basic than—those dealt with by physics and chemistry.

Marvelous* as is the natural world described by astronomy, geology, physics, chemistry, it seems to Longman that mental life as found in man is a far more remarkable reality. He frankly insists that a mind that can uncover the secrets of Nature and penetrate to her principles of organization, that can harness wind, water, gravity, steam, and electricity and make them do the lifting, pulling, pushing, and carrying which are necessary for man's comfort and welfare, is greater in the ultimate scale of reality than the natural forces which are thus harnessed. Buildings, bridges, engines, ships, tunnels, radios, come into being only as the product of men's effort to satisfy needs. Nature yields her strength and energy only when men subdue her by the superior power of intellect. . . . The easiest and most natural thing is to see only half the world, and the little half at that, the

* Quoted with minor changes from the author's book. *Personality in the Making*, pp. 6, 7, with permission of the publisher

material world and your fellow men as elements thereof; or worse, to see the whole world inverted as the image on the ground glass of the camera, with the material order on top.

Longman also affirms his conviction that personality is fundamentally spiritual in nature. One result of the modern scientific method has been to emphasize the materialistic aspect of nature to the exclusion of the purposive aspect. We can have no quarrel with science as an institution on this score, for that is precisely the office of natural science. But too often the scientists themselves have failed, perhaps to see, and certainly to state clearly, that after all the natural world with its mechanism is only a means in a teleological system. Mechanism has been treated as if it were complete in itself as an explanation of the world. In other words, mechanism in which every modern man must believe has been elevated to the position of a world philosophy, and thus made to carry a load which it is in no way qualified to carry. This is one main reason why the religious leaders of the last three hundred years have been in almost constant revolt against science and the scientific method. When it is once made clear that the world is ordered according to a plan and purpose, that it had an origin and is in the process of achieving a destiny, and that the whole mechanistic order is a means to a system of ends, and not an end in itself, both the scientist and the religionist should be satisfied. The temptation to regard personality as a mere mechanism will then be removed and it will be easier to see it for what it is, namely, a teleological unity, and consequently a spiritual fact.

Perhaps Longman's variety of idealism does not get very far in the way of an actual analysis and explana-

tion of the soul. Nothing definite appears in his philosophy as to the elements or essences or structures or functions of this alleged entity; much less has he shown how it originated and what is destined to happen to it. On the other hand, perhaps Longman has succeeded in establishing a congenial soil for the soul; perhaps his insistence upon the spiritual nature of reality, and the purposive character of the cosmos, is at least more congruous with a soul concept than frigid naturalism. If this is indeed true, a toe-hold in the stone wall of ignorance has at least been hewn out.

IV

TENACIOUS TRADITIONS

Winged Prisoners

NOTWITHSTANDING their nebulosity, a comfortable sense of security pervades the old familiar nouns and adjectives that have been used to denote soul. Call them to mind: spirit, breath, ghost, eternal essence, vaporous vitality, unifying principle, eternal entity. We have visualized soul as an invisible shape conforming more or less accurately, to be sure, to our physiognomy, but detachable and nomadic. We have figured it as inhabiting the body—a winged prisoner—which escapes at death and wafts itself elsewhere. The stuff of which imagination is made is sensory experience, and yet we have gone on trying to imagine the soul; and this denatured materialism was the best we could do.

Whether we are fundamentalists or not the chances are that our concept of soul comes down to us laden with the accretions of centuries of ecclesiastical handling. Take the case of Harriett Wilson as illustrative of the way in which the imagery belonging to the old concepts, and even some of those concepts themselves, persist from generation to generation and furnish the content of our thought as well as the categories in terms of which we tend to think.

Harriett has been very carefully brought up, but

unfortunately with a sort of double personality—one for Sunday and the other for week days; one for religion and the other for life. While not so unusual as to be abnormal, this duality of personality, like most instances of the abnormal, is an unconscious one, for I am sure the problem of harmonizing Burbank potatoes, for example, with a literal interpretation of the Scriptures has never occurred to her. Her scholastic tastes run toward literature and art; what science work she has done in high school and college was disposed of in a perfunctory, routine fashion in order to get the “requirements” off as soon as possible and with as little personal inconvenience as might be. So the “conflict between science and religion” has never entered the terrain of her consciousness. She is a fundamentalist, and her soul and its salvation is a very real if misty consideration.

The demand any philosophy of life must meet is that it shall offer a principle of explanation of all the major issues of life, or at least hit upon a point of view from which these issues may be envisaged. Fundamentalism does precisely this; without question it offers a principle of explanation and such a point of view. With the fundamental theses of this philosophy Miss Wilson is entirely familiar, for they have been the framework of her intellectual life since childhood.

One of the advantages of fundamentalism as a life philosophy is its comparative simplicity, its explicitness and concreteness. It has a specific answer to a variety of basic questions such as: What is the origin of the earth and the solar system? Where did life, including all plant and animal species come from? How did man originate, and what is his destiny? What is the authority behind the moral law? What

is the chief end of man? How can he attain happiness? What of sin and disease? What about life after death? Besides its definite^{*} pronouncements upon these questions, fundamentalism has the further advantage of being a philosophy ready to hand whose adherents interpret it with a high degree of unanimity.

Fundamentals

So Miss Wilson has easily slipped into a position which can readily be stated under the five generally accepted theses of fundamentalism:

Thesis Number One. The divine inspiration of the Bible and its complete inerrancy is the groundwork of her whole system. This applies particularly to the problem of origins. The moon and the stars, the earth and the sun, day and night, seasons, oceans and dry land, plants and animals, birds and fish, man, and lastly woman, are all accounted for in her philosophy by the Bible story of creation. Fossils, chromosomes, where Cain got his wife—things like that have simply never dawned upon her as problems at all.

It is all so beautifully clear to her that the Creator—a giant anthropomorphic God—took a handful of soil and shaped it into the form of a man and breathed into it the breath of life, whereupon “he became a living soul.” Of course, push the analysis further and it must be admitted that this “breath of life” was a rather stupendous and far-reaching as well as miraculous affair. For it transformed unorganized dirt into brain and bone, blood and muscle, stomach and lungs, heart and gland, and started them all working. Besides, “the breath” left an immaterial, intangible deposit called “soul,” although it has always been a bothersome question whether the rest of us inherit it

or receive it as a special creation fresh from the hand of the Creator, by a similar special miracle. At any rate, each individual, bright or defective, Christian or heathen, good or bad, has in him whether he will or no an immaterial entity which is immortal, and which can be little affected by heredity or education, by civilization or culture. In fact, nothing can change it but religion. Here indeed is the commission assigned to religion, for the working out of the plan of salvation for lost souls is the most important process in the universe since creation, and this is the exclusive field and function of religion. Which leads to

Thesis Number Two. By the "fall of man" human nature became intrinsically sinful, totally depraved. God created Adam and Eve free of will and cautioned them what they might do and what they must not do. But Satan in the guise of a serpent came and tempted Eve, and she disregarded the caution and ate of the forbidden fruit. She persuaded Adam to do this also. So both sinned and in consequence the curse of death was not only pronounced upon them by God, but sin was also by this act introduced into human heredity, so that their children were born with sinful natures and placed under the same curse as their parents. All the descendants ever since of the first pair were likewise born innately sinful.

Thesis Number Three. God then worked out a plan of salvation by which man might regain his lost estate. For He could not allow himself to be defeated by the machinations of Satan. Besides, He looked with peculiar affection upon man as His special handiwork and could not bear to refuse him an opportunity of escape from his evil heredity. Hence the plan of salvation. This centered in the person of His own son

Jesus the Christ, whom He sent to the world as the redeemer of humanity. Thus the philosophy of fundamentalism centers in the deity of Christ, the proof of which was the miraculous virgin birth. In fact, the whole system of Christianity stands or falls—so says Miss Wilson—upon the verity of this fact.

Thesis Number Four. But satisfactory atonement for the sins of men could be made only by the suffering and death upon the cross of the divine son of God. So provision was made in the plan of salvation for this vicarious suffering of the sinless Christ in order to open a way for man back to God and happiness.

Thesis Number Five. Finally the conquest of death—itself unknown until it came into the world with sin—was found in the resurrection victory of the Christ, which served to establish everlasting life as possible of acquisition for the believer.

The Soul of the "Fathers"

The picture of the cosmos and of life as envisaged in Miss Wilson's mind is thus the familiar and time-hallowed view projected there by the tradition of the fathers. It is a composite of special creation, total depravity of man, the deity (virgin birth) of the Christ, his atonement, and resurrection, on which Christian civilization is built; and in it also is wrapped up the seed of its destiny. Politics, economics, ethics, work, and play must all make their sanctions and their laws fit into that eternal framework. With the supreme worth and eternal value of the individual soul added, the picture is complete. For the whole plan of salvation was devised and set in operation to bring it at last through pearly gates into the

New Jerusalem, with its streets of gold, its thrones, crowns, harps, and hallelujahs.

It is also clear, adequate, and beautiful to contemplate. The only question is, Is it correct? There are always to be found running at large in society certain cross-examiners who insist on jostling the staid and respectable with their questions. So now. What about this matter of inspiration? Where does psychology come in? someone is sure to ask. Did Miss Wilson ever study geology or biology? If so, how are fossils, dinosaurs, heredity, and natural selection to be disposed of by her? Is it true that every child is inherently wicked, and is there any justice in infant damnation? How go about to prove there is a God? And even if there be, how do you know He acted in all these matters in this way, including the revelation of His will to men? What will you do with Einstein and relativity? How are you going to get round the references in the Bible to the four corners of the earth? What about the Neanderthal man and the remains of the cave dwellers? What about sociology and the stories of the evolution of civilization?

Miss Wilson frankly admits that she does not know how to deal with these questions. When they come tumbling in, as they occasionally do, she has a feeling of being lost and alone in an utterly strange world; she describes it as the dizzy sensation of being whirled about in a sea of hostile facts. Or it is like standing in the midst of a terrible battle of truth against error, in which she is a paralyzed and terrified spectator. She is sure she wants the side of truth to win, but not always sure which side truth is on, and she finds the issue getting more and more clouded for her all the time. She knows science is a wonderful process of

investigation; that it has produced all our practical inventions and marvelous implements and machinery, and that it is at the base of our modern civilization.

On the other hand, all her training at home and at Sunday school is on the side of fundamentalism. Her faith in God and her hope of immortality are bound up with these ideas. If that faith so expressed were to prove not true she does not see how she could go on living; for in her estimation all the values of life seem to depend upon it. It seems to her that the sanctity of the family and the need for a church and the authority of the moral law all rest upon the truth of the major premises of fundamentalism as she understands them.

This makes it easy also for her to believe that all the crime and lawlessness and immorality prevalent exists because people do not believe and heed this same truth of Christianity. More than that, it makes it appear as if the teaching of modernism in the schools and colleges were directly responsible for the irreligion and materialism, and the moral and social degeneration of the time, of which jazz, nasty sex literature, and degrading movies are symptoms. War, national and racial hatred, and the general breakdown of civilization we hear so much about are all the fruit of the infidelity and atheism due to the spread of modernism.

In her own State one of the leaders of the movement to have the teaching of evolution debarred from the public schools says: "I am a father pleading for the soul's eternal welfare of my two boys and their Christian citizenship and the future welfare of our country. Evolution undermines both, creates lawlessness, and produces atheists. I have over two hundred cases definitely reported to me where young people went

from Christian homes to college, high schools, or universities and came home evolutionists and atheists; therefore by its fruits shall it be known. . . .

"To teach atheism camouflaged under the name of science or scientific research is a fraudulent and deceptive counterfeit. There is no conflict between the Bible and true science, but there is a terrible conflict between the Bible and false evolution."

This statement of the case in favor of fundamentalism and against modernism impresses Miss Wilson very strongly. And when she considers all these facts, she is more firmly convinced than ever that fundamentalism is on the side of truth and righteousness.

Besides the warfare among the scientists themselves remains to be considered. Some of them, she has heard, are renouncing evolution; one renowned biologist has said Darwinism is an exploded theory. In any event evolution is just a theory; it has never been proved. Each generation of scientists refutes the one that went before, whereas religion always clings steadfastly to its affirmation of the supremacy of righteousness and morality and its offer of a means of salvation from the evils and sins of the world. Consequently, since the scientists are quarreling among themselves and some of them denying evolution,* and since in the opposition between religion and science religion is seeking to protect the great values that are basic to the best life, whereas modernism is undermining them, she cannot help continuing to side with the fundamentalists.

So the case stands as in the beginning. A purple haze of sentiment holds many pious people emotion-bound to the traditional modes of thought. But for

*See the section on Evolution, Chapter V.

some of us these have not only been emptied and become unattractive, but are now out of the question because they do not track with those giant caterpillar tractors of modern civilization—the scientific method and the historical point of view.

V

THE EMERGENT SOUL

The Historical Method

HARRISON is thirty-five and a school-teacher; also a student of history. He has acquired a view of history as not so much the recital of external facts in the life of a race as the uncovering of principles and tendencies at work which explain why the facts are what they are. From this standpoint everything in the world has a history; history is not merely nor chiefly the chronicle of the acts of men but of the development of all things. A star, a chemical compound, a crawfish, as well as a man or a nation thus has a history.

Nor is soul outside of its jurisdiction. For soul also has a history, which means an origin, growth, development, and destiny. In fact, soul itself must have emerged as an effect of the great purposes which are at work throughout the universe. It is organically related to the cosmos in which it lives and is in turn a coöperating factor in the further development of the world itself. Let the cosmic pageant be pictured in terms secured from these three great observation posts: the points of view of history, of science, and of evolution.

That the historical and scientific methods of analysis are mutually supplementary is a most significant fact. As an illustration, think for a moment of the progress

now being made toward the control of cancer! What is responsible for it? The answer is that the historian's methods of analysis are applied to the records of the disease as far back as these records go, and to the study of each case from its first symptoms. The scientist is called upon to use his methods of microscopic observation and chemical analysis at each step, the results are subjected to inference and deduction and testing, and finally the remedial measures so indicated are tried out. Always historical method plus scientific method—that is the story of the increase of human knowledge and control which we call civilization.

Now comes Harrison's third big idea.

The historical method and the scientific method have united in the discovery of a third post of observation from which to view the world. These two are the parents of a precocious offspring which has grown with such amazing rapidity that within the last sixty seconds of human history it has shot up into a lusty giant on a par with its progenitors. Evolution is the name of this prodigy. Evolution at the present moment is afflicted with a sort of dual personality. In the minds of the fundamentalists the status it enjoys is that of a vague hypothetical and heretical guess about origins, while to all citizens who have been trained in the methods of history and science it is thought to be a sweeping law of nature no more hypothetical than is gravitation. It serves them as the dominant principle of explanation in all fields of historical and scientific investigation.

Evolution

As far as Miss Wilson's notion that the scientists themselves are quarreling about evolution and some of

them denying it is concerned, this is sheer ignorance, an ignorance which is also shared by many leaders among the fundamentalists. It is an ignorance which identifies Darwinism with evolution. But, as every student of biological science knows, Darwinism was only one man's picture of *how* evolution goes forward. Whatever quarrel there may have been among the scientists centers about this *how* of evolutionary change and not about the *whether* of it. That evolution is a principle of nature is a conclusion upon which they are unanimous to a man.

There is nothing so eerie about evolution either, claims Harrison. Specific illustrations of it are the commonplaces of a great variety of occupational groups. The nurseryman is familiar with sports and mutations, and the horticulturalist with crosses like loganberries and plumcots. The animal breeder knows something about the four or five dozen breeds of dogs and their relation to the wild dog and wolf; and the differences between all domesticated animals and their wild progenitors are an open book to all. The whaler has seen the skeletal four feet and the lungs and mammary glands of the whale and knows it is a four-footed animal that has taken to the water and is in no true sense a fish. The miner has handled fossils of extinct animals and plants and is aware in a general way of the vegetable origin of coal. The geologist knows the race history of the horse back to the little eighteen-inch, five-toed quadruped which was its progenitor at an earlier stage of its development. The physician is at work all the time with an organism that is stamped all over with evidences of evolution. He is acquainted with race recapitulation as filmed in the

life history of the human embryo, and with vestigial organs like the appendix.

Now the scientist and historian simply gather together all these familiar instances, and many more not so familiar, into one broad and inclusive generalization called evolution, and show each in his own way that in this concept we have one of the most fundamental laws of the universe.

A complete list of the sciences from astronomy to zoölogy might be presented in support of the proposition that the structure of modern scientific knowledge in its entirety is built upon evolution. Each one of the four grand divisions of science utilizes the concept. Astronomical and geological science depose that the earth together with the whole solar system came to be as they are by a process of development. Biological science finds evidence not only for the belief that all species of plant and animal life originated by a process of differentiation and adaptation, but that the characteristic structure and function of each species came into existence in the same way. And what is more, they hold that life itself must have arisen as a result of the synthetic chemistry which goes on in nature's laboratory.

Similarly the psychological sciences together draw from the wealth of facts about mind now at their command the generalization that mind itself is a superior kind of life whose origin and development are accounted for by an extension of the evolutionary principle. So also do the social sciences add their confirmation of evolution by proposing still wider applications of the principle.

Thus not only does the application of historical and

scientific methods of research in each of these fields point to evolution as a law of nature, but every one of the sciences is organized around evolution as its core. Each science is also taught from the evolutionary point of view in every last university, college, and high school which is worthy the name. Its teachers were all prepared in graduate schools in which this was the underlying principle of interpretation; the textbooks were written by men who were true to this same training; in fact no authoritative textbooks in any of the sciences can be bought which are not written from this standpoint. The great majority of modern books in all our public and institutional libraries are saturated with the doctrine. Even the little stories about Ab the Cave-man and the Sea People to be found in the children's department, which little boys take home from the public library, presuppose evolution. Millions of dollars are invested by great publishing houses in literature of this flavor, and other millions are tied up in biological, horticultural, and animal-culture experiment stations, and in medical apparatus and equipment all operated on the basis of evolution.

Whether the fundamentalist likes it or not, says Harrison, the whole movement of scientific thought is on the common roadway of evolution. The spectacle of a little parcel of legislators passing a law that evolution must not be taught in the hope that further developments of this fruitful principle may be stopped is positively pitiful. An assembly of Tom Thumbs might as well sit on the bank of the Columbia River and solemnly announce that no more forever will they allow salmon to go up stream at spawning time.

Harrison is a bit satirical at times, and this makes

him ride roughshod over the sensibilities of folks who differ from him. But his quizzical smile takes much of the harshness out of his voice. He admits that evolution has no more been proved to be a law of nature than it has been proved that the earth is spherical, turns upon its axis, and revolves about the sun. Nevertheless the sphericity of the earth is a pretty well-established generalization as far as most of us are concerned. To the mind of the scientist evolution is about equally certain.

The Other Side of Fundamentalism

The vehement objection of a certain class of church people to evolution is founded upon their flagrant misconception of it. Evolution is supposed to make atheists out of people. Youths come home from colleges where evolution is taught turned into materialists and mechanists and infidels and scoffers. They no longer believe in God or morality or immortality; all the virtues and values of religion are tossed sneeringly aside by them as so much rubbish. . . .

And, worse luck, of some of them this is true, Harrison admits. But when it is, put this down: Zealots for religious tradition had preached to them that the alternative is *either* science *or* religion (meaning fundamentalism)—no one can cleave to both; everyone has to choose between them. And these students believed the preachers, and science was their choice. The colleges are partly to blame too because they did not administer a knock-out blow to the bugbear of *either . . . or*. They should have taken particular pains to show them that it is an *and* which confronts the student here—true science *and* true religion, not science *or* religion.

A recent distinguished fundamentalist always referred to religion as "revealed" and seemed to feel that in order to qualify as revealed it must be unreasonable. He was afraid that evolution, if true, would drive God out of business; perhaps out of existence. God, being omniscient, knew in advance that some misguided scientist, a depraved son of Eve, would come along in the end and invent evolution. To protect believers against this contingency God whispered into the ear of Moses, or to whomsoever we owe the Pentateuch, two versions of the true story of creation. These stories, the distinguished fundamentalist called revealed religion, and in defense of them was willing even to wreck the Constitution of the United States.

Just to put it in everyday language and give due prominence to points ignored by the mind-closing tendencies of blind worship, says Harrison satirically, the God of these fundamentalists is a wand-waving magician; a vacillating, impulsive, capricious giant who sends floods and fire from heaven, turns a woman into salt, stops the earth's rotation dead short, instantaneously starts it full speed ahead again, takes prophets bodily from the earth up to heaven in fiery chariots, drowns armies in the sea, rains flies and frogs down upon inoffensive as well as offensive Egyptians, is partial to the smell of scorched meat, accepts the rôle of champion to a band of superstitious nomads, and sets up headquarters in their crude canvas tabernacle.

It is terrible of evolution, is it not, to come along and offer itself as a substitute for these primitive conceptions of the Bible concerning God and His relationship to the universe! Revealed religion, forsooth! If evolution is responsible for shattering the undisputed reign of these conceptions then no greater service has

ever been done the human race by any idea or doctrine than by evolution in equipping us to sift the chaff from the wheat in these older ideas concerning the Bible, God, and man's relation to God and the universe. Nothing in the whole catalogue of human yearning after the truth and search for God, aside from the Bible (properly understood) and the personality of Jesus Christ, has been so serviceable a key to God's ways with the world and with humanity as evolution. If the opponents of evolution or those who are on the fence about the matter could once get through their heads the proposition that "nothing can be evolved from anything which was not first involved in that thing," it might help to cure them.

Harrison of course admits—and not only admits but rejoices—that if we renounce fundamentalism a new interpretation will have to be made of the Bible and its revelation of God and His relation to the universe. But exactly this must be done if Christianity is to be saved as a world religion. The only hope that Christianity has of survival in the struggle against Mohammedanism, Buddhism, and other world religions lies in a victory of modernism over fundamentalism.

As civilization proceeds, religion must become more and more spiritual, and that religion which most completely meets the highest spiritual needs of men will in the end become the dominant one. Harrison holds that the religion of Jesus as interpreted by the modernist completely fulfills these specifications and will in the end triumph.

But we must escape altogether from this bondage to literalness in biblical interpretation. Incomplete emancipation, he says, is the whole trouble with the

fundamentalists; they act arbitrarily in choosing what they shall interpret literally in the Bible. For example, they do not so interpret its references to the four corners of the earth, the cherubim and seraphim of Revelations, and the like; but the parts dealing with creation, the virgin birth of Jesus, his resurrection, etc., they do choose to interpret literally. If we moderns are to appreciate the Bible truly and find the maximum of solace and comfort or moral instruction in it, we must read it for its spiritual values, and not for instruction in science.

Modernism as Harrison understands it is nothing more nor less than the application of the most approved historical and scientific methods to the study of religion, and the application of the principles so obtained to the spiritual needs of the individual and of society. It incorporates the greatest of all the products of these methods—evolution—bodily into religion. And the next great step in the evolution of Christianity itself will be to give this new form a trial. Modernism is attempting to do this, and it is a pity that the progress of this world-saving program of modernism must be hampered by the cross-fire of the literalists. The sole hope, not only of Christianity's own preservation but that of Western civilization, is that Christianity shall put its essential principles at work in harness with all other agencies that are working for human welfare. In short, Christianity, according to the modernist, must incorporate and synthesize all available impulses toward righteousness into its own forward-looking program.

VI

THROUGH THE EYES OF A MODERNIST

Sunday-school Theology

I MUST confess to a weakness for Young. He represents the Youth Movement at its best, for he is not only critical but constructive. While he insists upon standing on his own feet, he is not iconoclastic. Clean and clear-cut both physically and mentally, tradition means nothing to him, and neither does convention; yet he entertains a kind of sentiment for them and sees no virtues in violating them just because they are tradition and convention.

Come to analyze it, I believe my admiration for him is stirred largely also because he has shown independence and moral courage enough to cut out athletics. Not that I have any deep-seated antipathy against athletics—and neither has he; but as he figures it out athletics should be incidental to college life. And during the vogue of the present athletic cult the only way to make them incidental is to pass them up altogether. This is refreshing of him, to say the least. I am sure it is for the ten or a dozen studious Youngs that the good Lord spares the athletic Sodoms and Gomorrahs, called colleges, from destruction.

No one ordinarily expects to find a boy, an only son, whose home was broken up by divorce when he was a lad of ten, sticking to the Sunday school and church.

But that is what happened in Young's case, although during most of his nonage he was largely "on his own" too. Now the Ladies' Aid is helping him through college. But the significant thing is that after these years of saturation with good Sunday-school orthodoxy he is now passing through the significant period of reconstructing that Sunday-school theology to make it better fit his better-informed mind, an experience that ought to befall every young man and woman. But still more commendably, he has kept his sweetness of spirit and his loyalty to the church throughout the transformation.

What a Modernist Is

Now, to say that Young is a modernist denotes several important things. In the first place, it means that he is not so much interested in particular creeds and doctrines as he is in discovering a satisfactory method of approach to the whole problem of religion. A doctrine or creed is always subject to the tendency to fossilize. With its early pliability thus gone out of it newly discovered facts cannot be assimilated, and in consequence a "conflict" between the creed and the science or history or philosophy of the new time develops. The process of civilization has been a history of mental growth, but every kind of creed acts like a Chinese shoe upon the ideas incased within. So Young is suspicious of all creeds. He proposes to substitute "point of view" for a creed in his own thinking, and therefore is seeking a post of observation from which all the facts of religious experience can be seen in perspective.

In the second place, to say that Young is a modernist means that he is an evolutionist—a theistic evo-

lutionist. He believes in world growth; creation has been a process and is still in process, for creative work is still going on in it. Evolution is in no sense a substitute for creative action, but only a theory of the method followed by it. Every conceivable theory of origins has precisely the same facts of existence to account for. Evolution as a theory is simply an effort to describe in detail the way things came to be as they are; an effort to understand *how* reality operates, not *what* it is. And modernism is an effort to square scientific fact and law with religious experience.

Third, the modernist believes that God reveals this world plan to men progressively through their own experience and reason. Similarly, He reveals his will for their good to men through their own consciences as well as through that great religious epic, the Bible. But He crowns that work of self-disclosure by the revelation pictured in the perfect personality of Jesus. Divine revelation is thus a fact of human experience which is effective now as well as in olden times. It is none the less divine because it comes about through the normal functioning of God-given human minds, whether our own to-day or those of men in ages past. Young holds that the deliverances of his own conscience are a vehicle of divine revelation to him, and that the final seat of authority in regard to the meaning of the Scriptures and the teachings of the founder of Christianity, as well as the interpretation of the results of scientific and historical study, resides in his own consciousness and not in any outside creed or dogma.

Finally, to be a modernist is to emphasize social evangelism as the other half of vital religion coördinate with personal salvation. Young insists that the social application of the teachings of Jesus should be taken

to be as seriously imperative as the personal applications. He believes that the Kingdom of God means a Christian social order.

The Making of a Modernist

The transformation of Young from a fundamentalist into a modernist is an interesting bit of human history. He claims young people divide into four classes with respect to the religious problem. These are (1) the irreligious, (2) the fundamentalists, (3) modernists by reconstruction, and (4) modernists by social inheritance. Happiest of all is the young man whose childhood and youth were lived in an atmosphere where normal, sane, and vital religious growth was possible, and no intellectual upheaval as he neared maturity therefore necessary. For when a young man with a background of fundamentalist training goes to college one of three things will happen. If he chances to take only "safe" subjects, such as courses in literature, languages, and mathematics, he may come through with "faith unshaken," still a fundamentalist. This is rare. If he majors in biology, psychology, social science, and the like, he will be plunged into morasses of doubt, escape from which either lands him in the irreligious class, or, provided he has the requisite intellectual courage and wise guidance, in the class of modernists by reconstruction. This last was Young's course of development; and he counts himself fortunate that his period of reconstruction ended in so happy an outcome.

The turning-point in his development was his first encounter with evolution, which he ran onto in biology, psychology, and social science. In all of them it was taken for granted as a basic scientific concept. The

sequence of queries to which doubt led him ran about as follows:

If evolution is true, then what is left of the first chapter of Genesis?

If I admit that Genesis is not scientifically accurate, how does that affect the divine inspiration of the balance of the Bible?

If parts of the Bible are, and parts are not, revealed, how could I be sure of distinguishing the one from the other?

How can unanswerable moral and spiritual authority be claimed for a Bible not divinely inspired in every particular and consequently true in every particular?

If the conclusion be reached that the Bible is not divinely inspired, is that the end of belief that Christ was divine?

And if no sure ground is left for the belief that Christ was divine, can Christianity retain its validity?

If Christianity loses its validity, then what use longer are its churches and preachers and missionaries and the whole machinery of "Christian civilization"?

Looking at this chain of questions as a single interlocking problem, does it not put the case for Christianity as a revealed religion in a most precarious position? The inference to which it leads is that a tiny leak in the wall will cause the whole dike of revealed doctrine to wash away, that the displacement of a single brick in the foundation of fundamentalism will let the whole superstructure tumble. This question

Young held in solution for a year, fearing on the one hand the apparently disastrous religious implications of the scientific doctrines, and on the other hand despising himself for his lack of courage in refusing to accept the truths of science.

Eventually, as a flash of insight the whole thing came clear to him when he discovered an interpretation of the Bible that seemed to satisfy him. He says he "got" it as some folks "get" religion; it was like an old-fashioned Methodist conversion to him. Here is his principle:

Not only is evolution true in science, but the Bible is itself a product of evolution. It is the record of the intellectual, moral, and spiritual evolution of a race. God's will for all men was revealed through the experiences of this group and the insight of its seers.

The moment he grasped that principle, he saw the answer to those seven troublesome questions. The Bible was true, after all, completely true. He could now believe it from cover to cover because it was all to him a mighty spiritual epic, the story of the intellectual, moral, and spiritual history of a chosen people and the progressive revelation of God's will to them through their own experiences.

Genesis was then no longer a problem. Its story of creation was the first hypothesis of the ancient Hebrews in answer to the insistent question regarding origins with which every generation since has been confronted. And a mighty good hypothesis it was too, considering the meager store of astronomical and biological knowledge they had. The story which the Bible tells of moral evolution is as plain as day. From polygamy to monogamy, from slavery to a high regard for the

personality of every individual, from offensive wars of extermination to "peace on earth and good will to men," from "an eye for an eye and a tooth for a tooth" to "love your enemy" is enough in the way of moral evolution to satisfy anybody. The fact is, this evolution in moral ideals so far outran human practice that we have not yet been able to catch up with it.

Probably everybody will admit that the Hebrews were a chosen people as far as capacity for moral and spiritual insight is concerned, just as the Greeks were a chosen people as regards philosophy and art, and the Romans with respect to law and organization. And it is significant to note that Jesus was a Hebrew. He could never have been produced by any other social inheritance than that in which moral genius and spiritual insight and yearning were dominant national and individual traits, and hourly religious devotion the universal habit; where righteousness was as much the aspiration of every devout Jew as truth and beauty were of the Greek.

So it is perfectly easy now for Young to believe in the divinity of Jesus, for he looks at Jesus in his historical setting and makes the quality of his life and teachings the test of his divinity. Young used to believe like all fundamentalists in the virgin birth of Jesus, and supposed that it was the proof of his divinity. But he is not interested in that question any longer; it seems non-essential. The crucial point about Jesus for him is that the philosophy of life he announced and the success with which he practiced it have made him the pivotal figure of history. At the particular moment in the incalculably long course of human evolution when man was ready for a new way of life, Jesus appeared and announced that new way of

life, the mastery of which was to become the next step in human evolution. This to Young is an inexpressibly more cogent argument for the divinity of Jesus than a most meagerly supported account alleging that his birth was miraculous.

What a Modernist Wants

Young is interested not only in his own individual salvation from sin but also in the perfection, of his personality as a dynamic force in the world; in the complete realization of his potential self; in his intellectual, emotional, and volitional enlargement to the fullest measure of his "I. Q." Further, he is interested in discovering the kind of education and the kind of religion which will bring him to a right understanding of his relation to the universe and to God. His is a growing attitude of reverence toward and love for God as the infinite Father of humanity, and of love and service for his fellow man. The problem of total depravity bothers him no more. He now believes that every individual comes into the world, just as psychology says—a non-moral being with great potentialities for good and for evil. The precise kind of life he will lead is going to depend considerably upon his social inheritance.

As a modernist Young is also interested in the coming of the kingdom of the Father. He believes Jesus meant precisely what he said when he prayed, "Thy kingdom come as in heaven so on earth." So he is tremendously concerned about exchanging the present social order for one built according to the specifications of the Sermon on the Mount. As a step in this direction Young is interested in perfecting the church as an agency of salvation, not only in the individual sense but in the

fuller social sense. He is interested in all measures for resanctifying the home as the greatest single factor in the individual's social inheritance. He is eager to see the state and industry conform in their principles and practice to the ideals of Jesus, and the school and all other institutions "hustle history" in the upward direction.

He says that unless Christianity can be made to work in this way he would about as lief be a pagan. As between the classic Christian scheme of personal salvation and Buddhism or Mohammedanism he sees little to choose. They are also world religions, each offering a plan of personal salvation which looks about as good to him as the traditional Christian plan. He believes that Christianity as interpreted by the modernist is the only world religion which provides for human progress, because it is the only one that can adjust itself to the growing body of scientific knowledge and welcome the aid of scientific investigation in harnessing nature and organizing human society to promote the general welfare of mankind. Other religions including the fundamentalist form of Christianity are in eternal conflict with science. So he agrees with Harrison in insisting that the only hope of Christian civilization lies in the triumph of modernism over fundamentalism in the present conflict between the two. For modernism alone can do teamwork with those methods of scientific and historical study which have furnished modern civilization with its basic ideas.

A Modernist's Soul

My friend Young has arrived at this position partly by his own reflections upon what he has learned of science, history, and philosophy, and partly as the re-

sult of his reading. For a fellow who has been so largely on his own financial resources he has read very widely. The bit from all his philosophical reading he treasures most highly is Durant Drake's "creed" as stated in his *Problems of Religion*. Young has copied this in a little pocket notebook which he carries with him constantly.

I believe in God, the Eternal Power that makes for righteousness and all good; known to us in Nature, speaking to us as the Holy Spirit in our hearts, incarnate in the soul of Christ. I believe in the Way of Life taught by Christ, in the Bible as a revelation of God, and in the power of prayer unto salvation. I pledge myself to live by the eternal laws of God, looking to Christ for guidance and strength; to resist unto the end all sensuality, selfishness and sin; to work loyally with the Church of Christ for the coming of the Kingdom of God on earth; and to cherish the hope of eternal life.

Young prizes this statement because for him it summarizes accurately and concisely what he has come to believe. He feels that it defines the very essence of religion and that it is wholly in keeping with the truly scientific and historical points of view. Belief in God, in Christ, in the Bible; the cultivation of faith, love, prayer, and personal purity; loyal coöperation with others for the bringing in of a better social order and staunch allegiance to the hope of immortality—these to Young seem the very essence of religion. Though not interested particularly in creeds, he is fond of this statement because of its elasticity and its tolerance. It seems to him a point of view rather than a hard and fast definition of faith. He believes that even if the

statement does not affirm *all* that each of us may believe, certainly it contains little to which the most devout would object.

As to the precise nature of the soul, Young is keeping an open mind. Old misty images of tradition still crop up in his imagination when he undertakes to think the religious problem through; and do what he will he cannot wholly banish them. He realizes that the concept "soul" is in for a reorganization as thoroughgoing as that suffered by the concept "Bible," but just what the final picture is to be is not yet clear to him. Part of my motive in writing this book is the hope that it may help Young to reach a measurably satisfactory conclusion to his problem.

VII

THE STAIRWAY OF THE SOUL

An Architect's Elevation

By this time it must surely be clear to the reader that the soul is indeed almost inaccessible. We have made sorties in its direction from many different vantage-points, but so far our efforts have been only indifferently successful. The materialist has told us what he sees when he looks for the soul; we have also had the objections to the materialistic view pointed out to us by the idealist. Yet while materialism left us cold, idealism left us with a sense of inadequacy; it did not quite reach the mark. Again, the version of the fundamentalist did not square with what we learn about reality through science, and although evolution gives us a good account of *how* life came into being it proved too indefinite to satisfy us as to *what* life is. Even modernism itself is more an attitude of mind and a method of investigation than an account descriptive of final solutions.

Is there, then, no objective approach to the soul?

Are we, indeed, left each with his own preconceptions and images, in the absence of any general principles valid in whatever way they may need to be applied? Must we be thrown back upon a choice between hopeless agnosticism and the nonchalance and flippancy of my friend with the fatal disease?

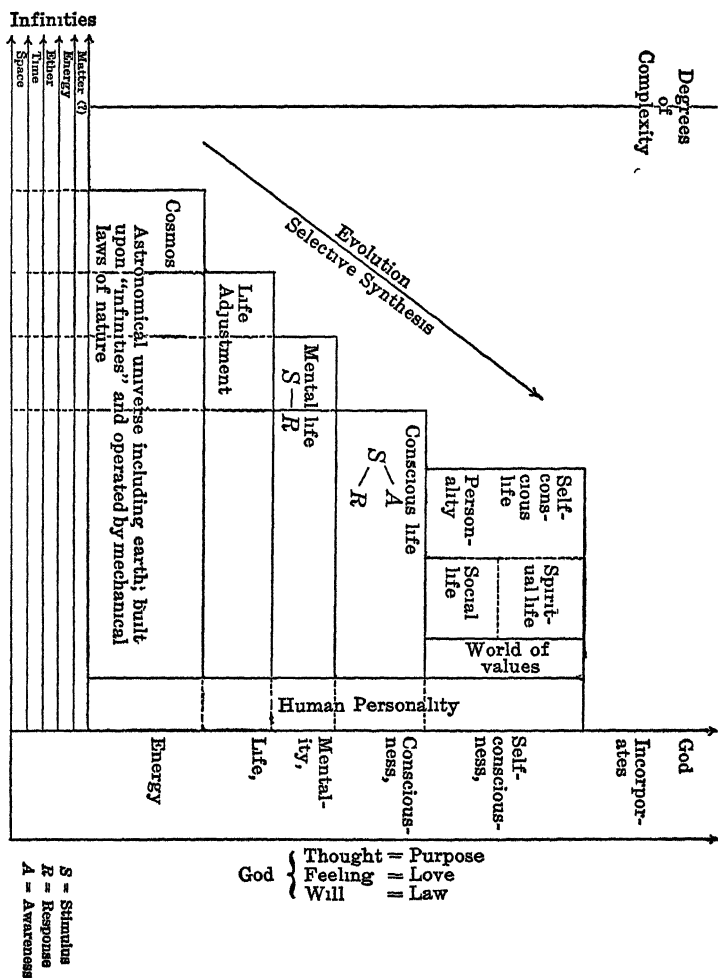
Before accepting either choice, another method remains to be tried. So far our method has been the use of analysis in this effort to find the factors composing the soul. While I believe we may rest assured that its main factors have already been probed for successfully, the analysis has been made from so many different observation points that the factors thus all laid out in a row do not mean much of anything. So the next step must be an attempt to put them together into some sort of composite picture of the soul; to weave them into a single pattern.

One of the peculiar difficulties of this complementary business of synthesis is the multiple ties of soul which seems to be so organically bound up with the whole system of matter and energy, law and mind, consciousness and value which we call the universe; a difficulty that requires a sketch of this cosmic background before we try to picture the soul if we would see the soul in a true perspective. To this end suppose we begin by constructing a blue print of the cosmos—a sketch that will show the levels of reality of which the universe is composed. Room will be found in it for most of the items which have been insisted upon by Harbin, Longman, Harrison, and the other individuals whose philosophies we have been considering. In fact, our task may turn out to be little more than a synthesis of these various principles and points of view.

The Philosopher's Blue Print

The specifications that go with the blue print begin with Harbin's materialistic and mechanistic description of the world at their bases. He assumes that the universe is a system composed of certain "infinities" or components unlimited in duration and extent, namely,

THE BLUE PRINT



space, time, ether, matter, and energy. These constitute its "makings." Now we shall probably grant that all the finespun arguments of the idealist do not talk us out of belief in the reality of these basic factors. We shall keep on thinking that out of them is constructed the world known to astronomy, geology, physics, and chemistry. The idealist who says that the telescope, the star, and the light are complexes of sensations, and consequently that they exist only in the mind perceiving them, does not convince us. On the contrary, it seems to us more reasonable to assume that light and star were already here long before there was a finite mind to perceive them; and that they might continue to exist were every spark of life to vanish from the globe. We must not think of the universe, however, as a collection of isolated factors; energy and matter (if matter is indeed something more than one of the forms of energy) interact in space and time according to laws which are as eternal as energy itself. Thus they form the realm of mechanism par excellence; of the existence of the sway of mechanism here, there can be not the shadow of a doubt.

But the significant thing about the natural world is that it becomes the breeding place of life. How life got here is one of the most perplexing problems in the universe. Whether it was transported here from some other planet or arose through a synthesis of chemicals belonging to the inorganic world, or was created out of hand by some superhuman being, has not been determined, and may never be. But here life is, rooted and grounded in the "infinities," and interacting with them on every level. The basic functions of a living organism are: first, nutrition or the ability to reach out into water, earth, and air, extract chemical sub-

stances from them, and transform these into living tissue; second, reproduction, or the ability to divide its bulk in such a way as to produce another organism with the same structures and functions as those of the present; and third, regeneration, or the ability to repair damage and wastage within limits and thus to preserve its own existence. Life in even its lowest forms always exhibits these three functions, and this biological level furnishes the foundation on which those higher levels of mentality, consciousness, and self-consciousness are superposed.

A second lift in the upward trend of life made its appearance when the diversified lines of experimentation carried on in nature's biological laboratory produced nerve tissue. Nerve tissue resulted from a new way of putting together hydrogen, oxygen, carbon, and the other constituents of living matter. Life thus becomes able to detect even subtle variations in the environmental forces playing upon it and to elaborate organized responses to these stimuli. And this synthesis exhibits a new set of functions. The psychologists call these functions irritability, sensitivity, conductivity, plasticity, and retentivity. Now hitch this new tissue to the older muscular system, and what happens? A brand new mechanism appears in the universe, as much of an improvement over the modes of locomotion and metabolism of the jellyfish as an airplane is over an ox cart. Superior adaptability to the environment is the outcome; for now the organism can interact in marvelously complex modes with time and space, matter and energy, and adjust itself comfortably to seasonal and geographical changes in its environment. Moreover, the nervous system of a new-born organism is gifted with more than mere ability to

respond haphazard to chance connections. Neural pathways between certain stimuli and their respective appropriate responses exist in the organism at birth. These formed connections are known to the psychologist as instincts. No instance could be found more clearly illustrative of the function of this pre-natal set-up of the nervous system than the dramatic behavior of the yucca moth. The yucca moths, Lloyd Morgan tells us in *Habit and Instinct*, "emerge from their chrysalis cases just when the large, yellowish-white, bell-shaped flowers of the yucca open, each for a single night. From the anthers of one of these flowers the female moth collects the golden pollen and kneads the adhesive material into a little pellet, which she holds beneath her head by means of the greatly enlarged bristly polyps. Thus laden, she flies off and seeks another flower. Having found one, she pierces with the sharp lancets of her ovipositor the tissue of the pistil, lays her eggs among the ovules, and then, darting to the top of the stigma, stuffs the fertilizing pollen-pellet into its funnel-shaped opening." Professor MacDougall in his comments points out that "nature has so constituted the moth that she performs this cycle of nicely adjusted actions, essential to the continuance of the species, shortly after emerging from the chrysalis, when she cannot have acquired any knowledge of the flower or of her grub and its needs."

This is a beautiful instance of the forms of behavior called instinctive adaptations or adjustments. They are always correlated with a nervous system and may be regarded, if one chooses, as a sort of subconscious mentality. That term "subconscious" is hard to part with, although many unfortunate and impossible meanings have become attached to it which render it ambig-

uous and almost unusable. We have just used it here in its racial genealogy sense to stand for those elemental types of teleological response which occur in a nervous system with specialized receiving, transmitting, and effecting organs connected with a muscular system. The activities of this new system also go on "below the threshold of consciousness."

The next step up the stairway brings us to the level of simple awareness, or life that is conscious. Given a nervous system such as is found in the vertebrate, with its elaborate set of specialized sense organs, a creature possesses raw material that can be worked over into "experience." A nervous system of this degree of refinement will also have a "cortex" or brain of gray matter as a partner, which is the guarantee of the presence of an elaborate associative machinery. As a result the vertebrate, and especially the mammal, is aware of widely varied sights, sounds, smells, and tastes acquired from an enlarged environment, which are accompanied by "affections" of pleasantness and unpleasantness, that go to make up a much more varied and rich existence.

But imposed on this level of conscious life is still another stratum, the crowning stage of the evolutionary process—self-consciousness. Self-consciousness differs as much from consciousness as consciousness from subconsciousness, or as mentality from nutrition or circulation of the blood. A glance at the table of contents of almost any book on general psychology will emphasize the complexity and the dignity of this apex level of life. Self-consciousness implies the possession of ideas and concepts, judgments and reasoning, ideals and standards, values and choices, decisions and plans; in fact, all that is highest and most unique in human-

ity. Indeed self-consciousness denotes the presence of spiritual attributes, of an aptitude for social life; in short, of personality. And the crucial problems encountered on this highest level of reality are those connected with personality, itself the most interesting and the most baffling of all problems.

How these successive levels on which reality breaks through from the inorganic at the bottom to self-consciousness at the top are integrated into human personality will be explained later. In the meantime further discussion of the general principle operative in the universe around us will be helpful in preparing us to understand the evolution of a personality.

Selective Synthesis

Accordingly, the question as to how the universe got this way, how the present multiple-storied structure arose, still needs a bit of attention. Was it done as a carpenter would make a stairway, sawed out piece by piece, fitted together, and then set into position ready to function? Or is it just a happen-so? Were the materials simply allowed to tumble about like thrown dice and did they by chance fall into these arrangements? With reference to the origin of things we have used the terms "emerge," "points of new departure," and "selective synthesis." But what do these terms mean? *

As a matter of fact, most philosophers and scientists of the present day hold, of course, that the universe has developed and grown. The *how* of it all is one question and the *why* is another. One answer to that how is the law of "selective synthesis," which approves

* These terms "emergent evolution," "selective synthesis," "points of new departure," have been tellingly employed by C. Lloyd Morgan; but they are here used with a slightly different flavor.

itself to many philosophers as an acceptable method of producing the relations apparently existing between the several levels of reality in the world structure. If heat is applied uniformly to water, the temperature of the water rises at a regular rate up to a certain point (100° centigrade). Up to this point the volume of water increases in equal ratio to the rise in temperature. But at 100° C, a point of new departure is reached, and between 100° and 101° C the volume increases in one jump by many hundredfold. Following this new departure the water behaves so differently that a new name, steam, is given to its many new qualities and properties. Again, hydrogen and oxygen are two gases each with its own attributes, which may be combined under proper conditions to form water— H_2O —a new substance with properties wholly different from those of either of its components. If sulphur be now mixed with these same elements under proper conditions, sulphuric acid (H_2SO_4), a still more complicated substance with totally new properties and wholly different functions will be produced. Selective synthesis seems thus to be clearly operative in the inorganic world—in the world of physics and chemistry. This is to say, the formation of combinations possessing attributes different from the sum of the attributes of their constituents is everywhere discernible. But the crucial question arises as to whether it is also operative on the higher levels of life and consciousness.

An examination of the upper levels with this question in mind suggests that here also the principle of selective synthesis is discernibly at work. Carbon, hydrogen, nitrogen, oxygen, and certain other chemical elements combine in some mysterious fashion, as yet not imitable by human experiment, to arrive at another

point of new departure in the form of a compound called protoplasm, possessing new and radically different properties and functions. Protoplasm, the universal living substance, can be broken up into chemical elements, and it is easily within the power of imagination to suppose that nature, in her marvelous laboratory, could have produced by selective synthesis this new compound, which would then proceed to exercise all the functions of an organism.

Similarly, mental life, conscious life, and self-conscious life each seem to be a point of new departure, at which synthesis on a higher level has produced successively higher types of living organisms, each level being rooted and grounded in that next lower. Creative evolution—the how of the constructive process—thus has grown and is still growing a universe by means of this principle of selective synthesis.

Purpose

But there still remains the question concerning the why of the constructive process: What principle or force governs the selection of the attributes characteristic of these new points of departure in the universe? Selection in terms of what or upon what basis? The only answer to this question which I can discover is furnished by what is called teleology—the doctrine that purpose is present in the universe. Our blue print of the cosmos seems to show an unmistakable “tendency” operative on the part of reality. The universe is not simply an assemblage of random changes leading to no definite result. It is not a going concern in a mechanical sense merely, but it shows drift or direction in its movement; it is headed somewhere, toward some goal which has the appearance of being intended.

This purposive view would solve the old debate between the mechanist and the believers in conscious design in the structure of the universe. The whole system of natural law can now be regarded as a mechanism, which is nevertheless the tool by which the ultimate purposes of the universe are worked out, much as the body machine is the mechanical agency through which you and I work out our life plans.

Creative evolution is thus best interpreted as inclusive of mechanism on the one hand and purpose on the other. It then becomes a workable hypothesis to explain why the universe has reached its present form.

One more question. What, precisely, is this objective toward which evolution seems to be leading? That question is indeed a difficult one. In answering it one enters the realm of pure speculation, for there is little in the way of scientific fact or human experience to indicate the correct reply. Yet we are not left wholly without a suggestion to guide us even here; for when we turn to religion we find in aspiration for human betterment the kind of value which mankind places at the top of its list. In the Christian religion at least uprightness of character, beauty, righteousness, spirituality, and the like are the qualities most highly prized. Since these values have already been produced in the rough by the evolutionary process, perhaps the purpose resident in the universe is to refine them in higher and higher degree. Perhaps the development of the human race into individuals who shall approximate in excellence to the personality of Jesus is part of the plan; and perhaps the development of a human social order which shall conform to the specifications of the Kingdom of God in so far as all the higher spiritual values are concerned, and become the norm for all citizens, is

a corresponding part of the program of creative evolution.

Where God Comes In,

But another approach to this question as to the ultimate purpose in selective synthesis brings us squarely face to face with the problem of the existence and function of God. Here again proof seems to be impossible. Nevertheless a bird's-eye view of the set-up of the universe shows faith in a divine personality to be consistent with whatever scientific knowledge we have at present, in fact, logically seems to demand the "personification" of the fundamental reality resident in the universe. If we do indeed live in a *universe*, a coherent system of things, belief in the existence of some unifying principle amid the multiplicity of its factors seems a necessity of thought. That unifying principle must embody in its own nature all the factors—energy, life, consciousness, and self-consciousness—already explicit in the universe. Such a unifying principle, corresponding to the God of theology, thus becomes the support on which the whole system leans, and at the same time is the goal toward which creative evolution is tending. As end term God is therefore an attractive force with pulling power enough to lift the framework of the world into ever higher zones of reality. The block-and-tackle which operates thus to upraise the world is the process of evolution working through the principle of selective synthesis. Darwin talked of natural selection—a negative process by which individuals unfitted to survive perished in the struggle for existence; but the theory of selective synthesis takes cognizance of this upward pull and makes selection a positive process. Evolution is thus not

a thrust upward from below, but a pull exerted from above; in turn the ultimate basis of energy or matter itself becomes the coextensive personality of God.

Someone may object that this savors too much of anthropomorphism, or the picturing of God in human terms. But after all, the highest type of reality of which we have any experience in the universe is spiritual-mindedness in human personality. If human knowledge and experience are therefore to yield any concepts by which to think of God, we should expect to find them precisely here in this highest zone. "Spiritual anthropomorphism?" Yes, if you choose. For it declares that the mind of God is the seat of that final purpose toward the accomplishment of which evolution is headed.

The picture of God which is revealed from this point of view, then, is that of an infinite organism whose being encompasses and contains all levels of reality from the base to the top of our stairway universe. His *will* is thus what the scientist knows as *law*. He is life and mind and consciousness and self-consciousness too—all raised to the *n*th power. His thought is what the philosopher speaks of as ultimate truth; and his feeling, what the religionist speaks of as divine love. He is the creative agency everywhere, and evolution is his method.

VIII

THE STAIRWAY OF THE SOUL (*Continued*)

Personality

THE taproot of personality sinks itself down through all the five levels of reality in our blue print, as they rise one upon another. When the German philosopher said that personality is a microcosm of the whole universe he meant that personality embodies all the types of reality found therein, and combines them into a higher order of being than any found at any of the levels below itself.

A philosophy of personality would therefore have to descend into the chemistry of the soil out of which it has grown or, putting it differently, into the elements out of which it has been synthesized, to discover the laws and determiners of its synthesis. Driven back thus into the domain of Harbin's mechanistic conception of life, it would have to think of personality to begin with as an organism built of colloidal protoplasm, that is to say, of hydrogen, oxygen, nitrogen, carbon, potassium, and so forth, assembled in certain patterns. But personality is more than protoplasm; something in the make-up of heredity causes the human embryo to develop into an organism with powers beyond the vague responsiveness of the paramecium. The selective activity of creative evolution has been shaping through eons a pattern of life infinitely more complex and teleological than that of such

a creature as the sponge. Notwithstanding the supreme dignity of personality, however, we cannot get away from the fact that it is first of all rooted in a body and a physical life with all the functions of nutrition, reproduction, irritability, and response characteristic of even the lowest forms of life; and the kind and quality of personality in a given member of the human race is determined in part at least by the efficiency of his body chemistry and physiological mechanisms.

· *Personality Rooted in Sound Inheritance*

As we saw in the preceding chapter, at the second level in the ascent toward personality a new type of tissue occurs called nerve tissue. The ability to receive and respond to stimuli, which in the simplest forms of living creatures is a property of the entire organism, now resides only in the nerve tissue, and becomes much more distinct and elaborate than before. In the appearance of this individualized stimulus-response function, the psychologist immediately becomes interested. The organism is no longer simply a biological entity; it now evinces that phase of life called mentality.

But personality—what has mentality to do with it? Just this: that human personality is an organism with a life carried on in the zone of mentality, as well as in the zone of mere animal existence. The psychologist will tell you that the native equipment of the normal human being consists in part of an outfit of reflex responses such as the knee jerk, iris contractions, coughs, sneezes, and the ability to swallow, all of them automatic particular responses to particular stimuli made possible by an inherited set-up in the nervous-muscular system. Superimposed on the digestive, cir-

culatory, respiratory, and reproductive mechanisms, they are, however, signs of the presence of something higher—mentality. Moreover, a human being inherits a whole galaxy of other more complicated nervous connections in which both the stimuli and the responses are more intricate. The psychologist calls these inherited tendencies instincts. They are scarcely ever complete in human beings at birth and are extremely susceptible to modifying changes in the course of experience. In fact, the precise mode of their development depends upon experience. This accounts for the perceptible variations in the instincts from individual to individual; they are alike in general but different in particulars. It also accounts for the great effect on the personality of early home environment, for these the individual receives his first impressions, at a time when his instinctive equipment is most plastic. Time and place, the energies of inorganic nature and the variety of surrounding life, weather and shelter, food and food-getting, and in fact all stimuli which affect mankind, act and interact with man's inherited equipment to weave the texture of that elusive form of life called personality.

But even this is not the whole story. Later at a new point of departure another brilliant achievement of mother Nature occurred; the trait called awareness puts in its appearance at the fourth stage in the upward cosmic trend. While a decentralized nervous system, often the vehicle of elaborately organized instincts, was being domesticated in many diverse settings of bodily structure, in hydra, starfish, crawfish, and mollusc, experimentation was also going forward in the direction of creating a central nervous system. The vertebrate was being tried out frequently with ill suc-

cess. Strewn all over the world in all sorts of corners and byways and under all possible conditions of wind and weather may still be found the remains of blind-alley types of vertebrate organisms representing these losing ventures of nature. (The stories of these trial and error ventures are written in the rocks containing the fossilized remains of creatures now extinct.) But higher on up the stairway of life appeared in time a central nervous system consisting of a spinal cord and a brain with an outside layer or cortex of gray matter—a tremendous reserve of nerve tissue, a storage battery of nervous energy that even man at his best has not been able to utilize to a tenth of its capacity. But there it is, the promise of human attainments yet undreamed of!

Even at the sub-human levels of vertebrate life, as for example in the dog, this new life function which the psychologists call awareness leaps forth. Consciousness, we call it when we experience it in ourselves, and intelligence when we observe it in others. At this level of life stimuli result no longer simply and solely in responses. Stimuli may now continue to set off responses directly and immediately. For example, the bang of a door (S) may produce (R), a jump. But the "experience" does not end there. At the same instant that we jump we hear the sound of the bang, which means that we are aware of it. The formula for mental action is $S \xrightarrow{A} R$, instead of S-R, in which A = awareness. We may also be aware of the jumping which is done and of our own awareness of both the S and the R. But that is another story, which must wait.

All higher animals, such as the dog, live a life rich in awareness of all sorts of stimuli from all sorts of

objects. The dog has as good an outfit of sense organs as yours or mine, and even better in some particulars—smell, for example. He must therefore have a varied sensory experience, abounding in sights, sounds, smells, tastes, and sensations produced by touch and muscular effort. He is equipped, therefore, with a complete set of what are named “receptors.” Moreover, not only may a dog which meets a rabbit be aware on the instant of the stimuli radiated from the rabbit, but his nervous system is also equipped to retain these impressions so that on a similar occasion in the future when a part of the same stimuli are repeated he can reproduce the whole of his original response. If he happens a second time to pass the same spot where he formerly started up a rabbit, he will dash off along the same path which he followed before with all the emotional excitement of the chase repeated, even though no rabbit is now within sight or smell. In addition therefore to his outfit of “receptors,” he is in possession of an equally important set of what are named “retentors.”

Personality Conditioned by Higher Functions

This capacity for remembrance is the gist of what we mean by intelligence. The dog is intelligent; he can learn. Why can he profit by experience? Because he can carry it along in remembrance and modify his subsequent responses accordingly. His whole outfit of reflexes can thus to some extent be subjected to conscious control, or “conditioned,” as the behaviorists are fond of calling it. The pleasure and satisfaction or the displeasure and dissatisfaction which these reflexes yield become determining factors in the selective process named conditioning.

The point of this analysis is to show that on the

awareness level personality incorporates in itself intelligence as well as physical vitality. Intelligence has been defined in such picturesque variety as the following: "capacity to learn," "productive use of mental powers," "ability to think in terms of general ideas," "the power of good responses from the point of truth or fact," "capacity for knowledge and knowledge possessed," "a biological mechanism for adjustment and control," the ability to "unify the effects of stimuli," the "capacity for inhibiting and analyzing instincts," and "the ability to deal with novel data." But no matter which of these definitions is adopted, awareness is exhibited at its best in human personality. Nowhere else can there be found an equally delicate power of discriminating between sensations, responding to them, and retaining the impress of past experience. Man's ability to face new situations with insight and inventiveness, with purpose and power, finds no equal at any point up or down the family tree of life. So here again human personality is a microcosm or little universe in itself. All the functions of consciousness, as well as of instinctive action, are not only men's possession but in him find their best expression. Personality, then, holds matter, energy, life, mind, and consciousness—all five—in its embrace, all synthesized into a super-organism that acts upon and reacts to the great universe outside of itself.

But this is not all! Still another point of new departure, another jump in the way of selective synthesis, another creative achievement of evolution, makes its appearance with self-consciousness—the top landing in our diagram of the stairway of reality. Present in it is not only awareness of objects, but awareness of one's own awareness; awareness not only

of the world of space, time, matter, energy, and living organisms, but awareness of mind itself. The unique and distinguishing marks of self-consciousness are its triple capacity to function as thought, feeling, and will. Through the use of these man is able to interpret his other modes of contact with the world in which he lives, to recognize and appraise the multitude of values for himself therein contained, and to organize his own actions and the forces of nature for the accomplishment of the purposes that he forms.

Another basic fact about personality is that it is a social organism as well as a self-conscious organism. Human personality is always found associated with a society of persons. This multiplies its richness of life to the n th degree in any comparison with the lives lived by organisms on even the next lower round of the ladder. For every man, no matter how primitive, enjoys the benefits of some kind of family life, some sort of educational experience, some degree of religious inspiration, some measure of economic comfort and governmental protection; and the capacities of men for advance in the refinement of these relationships are almost infinite.

Behaviorism Inadequate

Now that we have placed our picture of personality in its proper cosmic setting we are prepared to give our reasons for disbelief in the adequacy of mechanism as a philosophy. We believe in a psychology that is not a department of physics or even of biology, and that sociology, ethics, and theology must be taken into account as well as physics, chemistry, and astronomy in any full and complete description of the universe. We believe that personality is a more significant factor

in the universe than atoms or energy. After we have accompanied the materialist and the mechanist as far as he is willing to go, we change guides and accompany the idealist to his goal of the reality of mind. Mechanism is part of, but not the whole truth. The reality which it explains is a segment that leaves by far the larger portion unexplained.

In recent years psychologists have been more and more inclined to veer off from the concept of soul, so much so that in that psychological extravaganza called behaviorism the soul has no more chance of receiving a true account of its anatomy than a ghost in a dissecting room. Behaviorism, which proceeds upon the assumption that the activities of all living creatures, including man, are completely explicable as a more or less complicated set of physical and chemical reactions, probably enjoys greater popularity at this moment than any other system of psychology. Indeed, as someone has aptly said, psychology began by losing its soul, then consciousness, and finally its mind, and now has nothing left to busy itself with but mechanical responses to mechanical stimuli. And while behaviorism may have done a good deal of harm to the principle of personal responsibility for one's own actions wherever it has been taken seriously as a philosophy of conduct, yet I have not the slightest interest in any effort to rule it out altogether, but only in that which seeks to supplement it and to set it in its right relations. It is useless to try to wipe out facts! And behaviorism is a collection of thousands of facts. The trouble is the truth extracted from them cannot be the full truth, because other facts are left out. Behaviorism bears precisely the same relation to an adequate psychology that mechanism bears to an adequate philosophy. Mechanism in philosophy reaches logical

conclusions from the data it employs, but when the data it rejects are included fuller truth is obtainable from the combined facts by the interpretation of them rendered possible in terms also of purpose. Behaviorism does not tell *why* we behave like human beings—far from it! The only thing it does is to draw up its own oversimplified account of human behavior. Light simply cannot be thrown on the *why* and the *what* of personality by analyzing synapses.

No; that light has to be sought in another direction. Personality must be looked at not only by itself but also in its proper setting against the background of the whole universe. It is for this reason that we have taken the trouble to blue-print this background of matter, energy, life, mind, consciousness, and self-consciousness.

Self and Society Twin-Born

Charles H. Cooley was the first, I think, to say that "the self and society are twin-born." He has shown with unmistakable clearness that consciousness of self as an entity is born of the perception that a fissure exists between the self and the non-self. Self-consciousness then begins at the bottom and grows upward. A child becomes conscious first of his body sufficiently to differentiate it from other objects, particularly other moving objects, dividing the living from the non-living. Then he discovers that his fits of anger or fear are his own and also his memory, ideas, and reason. Only in later childhood, after his concept of himself has grown to be that of a complex living organism composed of a body, bodily functions, a mind, and the seat of a form of experience conscious of itself and subject to his direction, has self-consciousness fully emerged. But throughout the process it is stimuli from and reac-

tions to other individuals which play the important parts. Comparisons, contrasts, and generalizations with reference to himself and to other people are the means employed to render the distinction between the *ego* and the *alter*, or "what-is-not-I," better defined. "Self and society for each of us are twin-born."

Here, then, is a basic principle which should control all our thinking in the regions of sociology, economics, politics, ethics, and religion. All those studies which attempt to analyze and describe and explain this top level of reality shown in our blue print must make this principle their point of departure. Take the case of religion, for example. If I were to write a philosophy of religion, it would start with the proposition that the religious life is a psycho-social life, consciously attached to certain social values. Its discussion would fall under three main heads: first, the psychological factors in religion; second, the social factors; and finally, the values which humanity strives for in its religious experience. In my judgment that would cover the whole case and serve to account satisfactorily for the spiritual life.

But this seems to give the question of soul a place of so little importance that it does not need mention. And indeed there is some argument in favor of omitting it from the discussion on the ground that the term "soul" unfortunately has become too generally associated with the static, the fixed, the undeveloping, the non-dynamic, all of which traits are very foreign to the whole concept of the changing universe pictured in our blue-print. If the term "soul" is to fit into this picture, it must needs refer to something dynamic, developing, growing, not remaining unchanged by its experiences, but nourished and unfolded by them. If

immortality is to be its lot, that immortality ought to be an achievement and not something thrust upon it, whether deservedly or undeservedly. . Soul, if it is to win our acceptance, ought to be definable in terms which are already familiar to us in science and philosophy.

On this understanding, let us proceed to define it as best we can in language with which we are already familiar.

The Soul

It may seem to you that we have been going through too many preliminaries in our search for the soul. However, we are now at the end of the trail and ready to present it to you in this proposition:

Soul is the self-conscious level of personality.

Let us look at our blue-print again. At the top of the pile is humanity, set off from the rest of creation by its exercise of the functions of self-consciousness. These functions we may list as follows:

FUNCTIONS	PROCESSES	SQICAL RESULTS	IDEALS
Interpretation (Knowing)	Description Explanation Reason Induction Deduction	Science Philosophy	Truth
Appreciation (Feeling)	Emotion Sentiment	Sculpture Poetry Music Painting Architecture	Beauty
Organization (Willing)	Habits Skills Choices	Institutions Plans Purposes	Goodness

Soul, thus defined as the life of personality at its self-conscious level, is inclusive of the activities, therefore, of the highest human attributes, both of John Doe individually and of mankind collectively—resting of course upon the non-mental and non-living as foundations. This at once frees us from further worship of the fetish that soul is some kind of entity alien to the rest of the organism, of which it is but a ghostly tenant or prisoner. This view makes an end of the old notion that soul was a ready-made, full-fledged airy, gossamer thing which was somehow slipped into the human body at a particular moment, as potatoes may be put into a bag. On the contrary, soul is as much part and parcel of our total life as body. It is the stratum of that total life which comes into being as a synthesis of the functions characteristic of the self-conscious level of mind.

When creative evolution had brought man to the point of thinking while he sat on a stump and whittled, then science was born. For man began then to wrestle with his universe. He was no longer willing merely to accept it; he questioned it, and also himself and the other whittlers. The answers with which men have sought to satisfy themselves makes a long story, which is embodied in the mythology, folklore, superstitions, traditions, customs, ceremonials, rites, and all that goes to make up a "culture." How these social products grow bigger snowball fashion on their travels from generation to generation by means of all the processes of social psychology! How the culture, layer upon layer, accumulates, the new often contradicting the old, and yet the old managing to persist in spite of the contradiction! Think, for example, of the Sermon on the Mount and militarism in the same cultural inheritance. Yet both are examples of an age-long

endeavor to understand and to adjust ourselves as human beings to the universe in which we live.

The most recent layer of this lore in our Western culture is science. Here, it tells us, is the last word in interpretation. And may we not believe, with our friend Harrison, that the race has at last hit upon the method which will enable it to realize its old dream of intellectual conquest? The contriving of an airplane is a far cry from the first rude contriving done by the whittler of the stump. And the Einstein theory is an equally long distance, mentally speaking, from the first folklore. But it is when the results obtained by science through its methods of analysis are combined with the results obtained by philosophy through its methods of synthesis, that we secure our most comprehensive account of the universe. Science and philosophy together constitute the binoculars through which the most truth can be seen—not so clearly during long periods of history as it can in the day of our modern successes in research work. Only in the event that our search for truth is ever completely successful shall we see the world clearly and see it whole, for that absolute truth is our name for the complete and accurate picture of reality.

The Top Functions of Soul

Interpretation, then, is a function that has been exercised by the human mind ever since man became human, that is, self-conscious. Reason is its process, science and philosophy are its products, and truth is its ideal. In proportion to our success in the ferreting out of additional bits of truth, progress follows in the elimination of contradictions and inconsistencies in our points of view and practices. This quest and

its fruits lie back of what is meant by becoming civilized.

Another function of the human mind is appreciation, or the perception of values. Appreciation is not a cold intellectual and theoretical judgment as to what is high and fine, but a passionate preference for the thing which judgment appraises most highly; if it acknowledges reason as judge, it appeals also to the emotions as jury. In the process the object of our preference is idealized. The particular appreciation that has perhaps been most actively in evidence throughout the centuries is the esthetic—the sense of and the passion for beauty. Art is the result. Music, painting, literature, sculpture, and architecture represent its major “forms.” That is “classic” which has been found most fully to express this feeling for beauty for the greatest number of people over the longest time. Esthetic values and their expression in art constitute a generous third of our social inheritance or culture.

Yet another function of the human mind is its powers of organization. Men can will to act in concert and in proof have left enduring monuments in the form of constitutions and laws and institutions. These provide the paths of least resistance or runways for myriads of men in their daily routine of adjustment.

Soul, to sum up, is the outcome of the exercise by human self-consciousness of its power to organize itself into a personality. Those conditioning factors in the evolutionary process which were tributary to the rise of human self-consciousness dowered it, in the same process, with all the elements it would need in building the soul. That point of new departure which marks the emergence of insight, a consciousness of values, choice, the ability to condense experience into con-

cepts, and the ability to invent and use language, is also the point at which the soul is born. Although self-consciousness is a concept arising just as any other concept arises, it marks a new stage in human evolution. Self-consciousness is not only conscious of memory but able to exercise it as a function for its own purposes; not only is it aware of the desire for food as a psychological phenomenon, but it can plan to satisfy that desire. Thus to be a soul means to be self-conscious of relations between itself and the cosmos, other selves, and God. That is the core of personality. Plato's old question as to whether the soul is immortal regressively as well as progressively is thus easily disposed of in the light of emergent evolution; for as a type of life like the jellyfish it had a birthday also like the jellyfish. But while it may be true that the "chemistry of the cell is the chemistry of the soul," as Harbin insists, the human reproductory cell contains infinitely more than chemistry has so far been able to precipitate.

Just what the conditioning factors and what the combinations were preliminary to the emergence of the soul, we do not as yet know. This is a dominant problem in the scientific investigations of the day. The full light needed for its solution will have to converge upon it from the regions of paleontology, archeology, anthropology, and psychology, as well as of bio-chemistry. Perhaps even these may not suffice; and in the end we shall have to call in the principles of teleology—of world purpose—as a contributory factor. Peradventure the idealist, the fundamentalist, and the modernist have been insisting after all upon a contributory factor quite as fundamental as, or even more fundamental than, any other in the catalogue, namely, a

purposive, self-conscious world energy known to religion as God. But the fact that science and philosophy have not yet discovered the origin of life or mind or consciousness or self-consciousness does not in the least dim our scientific and philosophical faith in the principles of evolution, mechanism, and teleology, or in their efficiency to produce that crowning reality in the universe—personality with its core of soul.

As subjects for study, mathematics or physical science, biological or psychological science, social or ethical science, each in its own right proves enthralling to him who secures an insight into its inner meaning. But to get an *outsight* by drawing a circle around them all and looking at them all from a post of observation external to its rim in relation to each other is a veritable inspiration. It imparts the kind of thrill one gets when viewing the ocean for the first time, or a panorama of majesty from a mountain crest.

If you set yourself the problem of integrating the findings of the several sciences into a single inter-related whole, the only arrangement into which they seem to fit together symmetrically is in the shape of the stairway which we have drawn. In this arrangement each level ranked higher incorporates and utilizes the materials, energies, and laws of all the preceding levels, with the result that at the top, in personality, we have an epitome of the universe. So it takes matter, energy, gravitation, bio-chemical forces, mental forces, and the factor of awareness to make a dog. And to make personality it takes all of these and the powers of self-consciousness besides. Materials, plus forces, plus laws, plus mechanisms, plus purposive oversight—these are the constituents of the universe. And they are all represented in human personality. Now project

THE STAIRWAY OF THE SOUL (*Continued*) 99

these distinguishing qualities of human personality to infinity, and you have—God.

That at least is the background against which we propose to ask the soul of John Doe, Member of the Human Race, to sit for its photograph.

PART II

A SOUL FOR JOHN DOE

IX

DOE'S PSYCHOSOMATIC CAREER

His Beginning

AND now we must condense the first twenty-one years of John Doe's life, so that its whole course may be seen in an hour.

His career began at the moment of conception, when a microscopic egg cell from his mother was penetrated by a spermatozoon from his father. The nuclei of these two cells unite, and the new individual is created. This fertilized egg cell embeds itself in the inner lining of the uterus of the mother, where the drama of its development takes place with startling rapidity. The cell divides into two new cells, and each of these again into two, and so on, with such rapidity that by the end of the second week the new individual is the size of a pea, and in four weeks, the size of a walnut. By this time the specialization of the main types of cells has gone so far that the various anatomical structures, such as bone and muscle and nerve, are differentiated and the pattern of the body is discernible. In eight weeks the embryo is the size of a lemon. In ten more weeks it begins to respond by muscular movements to stimuli; two weeks later, its heart starts beating and may be heard from the outside, tripping at the rate of 120 to 140 times per minute. During the remainder of the period of gestation, growth and development

continue to increase the size of the body and to perfect its structures and organs, so that by the end of the thirty-sixth week the fetus is ready to enter upon its separate and independent existence. During these later weeks the child-to-be lives a life of alternate rest, activity, and sleep. "It stretches, wriggles into a more comfortable position, sucks its thumb, and has hiccups."

The miracle of conception is an amazing thing in itself. The sheer mechanics by which two cells through mutual attraction fuse and straightway go to work to build a new individual according to the specifications of the race to which they belong and by which they were produced, is one of the most astounding phenomena in the universe. Radio, is mere child's play in comparison. There is a particular aspect of the reproductive process which forever fills me with silent awe—the fact or law of heredity. This is not the place to explain heredity in detail, even if to do so were possible. Each of the two original cells was tremendously complex to start with. They each had twenty-four bio-chemical structures called chromosomes, which are believed to be the carriers or determiners of heredity. It might be supposed that when the cells fused the new combination cell would have forty-eight chromosomes. But not so. For the business of fusing seems to involve the throwing out of twenty-four chromosomes, so that the new cell shall have exactly the original number. This elimination is the climactic episode in the career of the embryo. Think what hangs upon the selecting of these twenty-four! At this supreme moment the psychosomatic fate of the individual is sealed; for with the discarded chromosomes go those characteristics and innate capacities which he is *not* to have, while those

chromosomes which are retained determine what the color of his skin and hair shall be, his normal height, and indeed all of his more fundamental physiological traits. At that moment the dice are loaded to produce a pugilist or a pianist, a clown or a clergyman, a Simple Simon or a scientist. Not only are physical characteristics then determined, but the psychological make-up also, including the individual's temperament and degree of intelligence.

The marvel of it is that twenty-four frail chromosomes could possibly carry such a heavy load. But this is the verdict of the bio-chemists, although they admit that the exact *how* of it is still a dark secret which they have not yet been able to extort from Mother Nature.*

Pure science everywhere sets three successive objectives for itself: to describe, to explain, and to anticipate. Moreover, applied science seeks also to control. In the case of heredity, biology and bio-chemistry have scarcely attained the first of these objectives, to say nothing of presenting us with a complete explanation or of providing a program for control.

However, biologists have gone far enough in their descriptions and explanations to cause a total reorganization of the psychologist's concept of human personality and the human soul. The psychologist now thinks of personality as a psychosomatic organism, that is to say, an organism which is both a *psyche* (the Greek word for "soul") and a *soma* (Greek for "body"). In the earlier stages of John Doe's life his body functions more vigorously and continuously than his mind. If his development proceeds in the right direction and as far as it should, he will become a mind-

* Cf Wiggam: *The Fruit of the Family Tree*

body organism; his mind will gain precedence, and his life will center in his thoughts, desires, and resolves. Every one of the so-called mental functions (thinking, for example) is in reality a psychosomatic function; for it could not take place without the activity of the brain. There are, of course, plenty of mere somatic organisms, like the jellyfish or the hydra, in which protoplasm grows by assimilation and propagates itself without the accompaniment of any distinct consciousness; only organisms with nervous systems are psychosomatic organisms.

Mentality

The second great episode in the career of John Doe was the development of his brain and his spinal cord with its outlying tributaries. Wrapped up in some chromosome was the unit character or single biological tendency, responsible for the central nervous system, which in turn contains most of the significant factors in John Doe's individuality, his personality, and—shall we say—his soul.

While the bio-chemist has not yet gone far enough in his investigations to be able to say precisely how heredity works, so that he could predict the exact nature of the offspring of a given pair, the psychobiologist can say in general *what* the heredity of a given individual is. John Doe, for example, possesses by inheritance his digestive, respiratory, circulatory, reproductive, and glandular systems, and his elaborate nervous system. It is by virtue of this last that he is a psychosomatic organism, for mentality in its simplest form is a specialization of the ability to respond to stimuli; and it is well known that a specialized stimulus-response function involves among other factors a

nervous system connected with a muscular system, which in turn is attached to some kind of skeleton, either outside as in the turtle, or inside as in the fish. Let us suppose that some form of natural energy, such as light or heat, strikes the terminus of a sensory nerve. This is the stimulus. The stimulus sets off a nerve impulse, which traverses an arc ending in a "muscle plate," and straightway a muscular contraction ensues. The muscles being hitched to a system of levers called bones, part or all of the body is set in motion.

But whenever we call an organism psychosomatic we are by definition emphasizing the fact that its more elaborate, complex, and significant reactions are mental. The action of a digestive ferment is somatic, but the foraging done by an animal when hungry is psychosomatic.

Now, the point I am coming to after this long preamble is this: John Doe's heredity is of two kinds: (1) racial, and (2) individual.

For example, John Doe's nervous system develops without the aid of experience a number of very definite set-ups, or connections between stimuli and responses. When the door bangs he jumps, and this response he did not have to learn. His nervous system simply grew that particular sort of a set-up. Call it an instinct if you like, but any other term will serve, provided we understand that every species of animal has its own peculiar outfit of nervous set-ups, which provide it with responses appropriate to its bodily structure and natural habitat. At the bang of a gun the frog does not try to climb a tree but jumps into the water; the rabbit does not "play dead" but runs like the wind. And many of the native set-ups which are found in any one member of a species are found in all. These con-

stitute their common racial inheritance. John Doe also, by virtue of his membership in the human race, has inherited certain stimulus-response connections. These, a common possession of the human race, include such basic native tendencies, as sucking, crying, squirming, jumping at loud sounds, and so forth, in the infant; and gregariousness, sex attraction, self-assertion, and the like, in older people.

But after all, John Doe is an individual; and although he is like all other members of the race in their common inheritances he differs from every other one of them in certain other respects. Even physically, there is no one else in the world that presents exactly the same appearance, unless John happens to be one of a pair of twins; and perhaps not even then. Even the common inheritances mentioned above are not all precisely alike in John Doe as in other members of his family or race. Maybe he is more nervous and jumpy than his brothers or more gregariously inclined than they, or more pugnacious. He possesses the same general tendencies that other people possess, but some of them in greater degree than others.

However, this variation in intensity among instincts is the least conspicuous factor, as a rule, in the individuality of John Doe or any one of us. For there is a list as long as one's arm of individual peculiarities which may come to one by inheritance. Some of these again are merely somatic, such as the length of one's fingers or the ability to wriggle one's ears. Other more significant ones are psychosomatic, such for example as timidity, mechanical-mindedness, or artistic ability.

Let us be specific and say, for example, that John Doe at twenty-one is five feet, eleven inches in height, with dark hair, brown eyes, and a smooth dark skin.

He is slight of build, weighing one hundred and thirty pounds, a bit stooped, not athletic, but so nimble of finger that he can play half a dozen musical instruments. He is quick-witted and facile of speech, can play the clown, and is a general favorite. He likes company and is always in demand socially. He is physically cautious and prefers to read or fool about with a camera when others go fishing, swimming, boating, or hiking. He can draw well, and has thought of cartooning as a career, but since he also likes chemistry he has decided in favor of medicine.

Now the question is, How did he get this way? The answer is not easy. One difficulty is to sort out the characteristics and capacities which were native, already provided for and set up during the period of intra-uterine development, and a part of his heredity; and to differentiate these from the traits, mannerisms, habits, and skills which were acquired after birth. In a word, where shall we draw the line between native and acquired ability?

Psychologists have recently been much concerned over where to draw this line in their attempts to measure "intelligence." We have already noted what a variegated character intelligence has. Nevertheless all the intelligence testers are agreed that intelligence is something native, some kind of psychosomatic capital which was somehow deposited to one's account at the moment of conception. And you are lucky if you drew an intelligence quotient of 100 or more, and not so lucky if he drew less. The moment John Doe set foot upon the school grounds, some wise or unwise psychological technician hustled him into a laboratory and took his "I.Q.," much as a nurse would take his temperature. And clear through his college years he has

been "psyched" at regular intervals, now by the Binet test, now by the Terman, and now by the Thorndike. Just what an "I.Q." designates no one as yet is able precisely to say; and just what has been tested has not always been clear. But in fairness to the movement we must admit that in the intelligence test a method has been discovered which will in all likelihood prove of untold value in education. The happy time will come when psychologists on the one hand will have more clearly isolated the mental function called intelligence, and more accurately standardize their tests, and, on the other, when educators will have learned what use to make of the results of tests for purposes of education. In the meantime John Doe is one of the experimentees. He can, however, go right on developing his personality, whether or not it is known exactly what intelligence is or what his own rating may be, for intelligence is after all only one of a dozen equally important factors in personality.

Birth

But we have got ahead of our story, for we were in the midst of trying to see what portent was involved in the reproductory process which launched John Doe upon his career, and what the elements in his inheritance are.

During his career there are four great points of new departure. Of these, certainly conception is the first. No better example of selective synthesis could be found, were one to scour the universe, than conception—the union of the chromosomes in the form of this unique pattern. A second stage in John's career is signalized by the appearance in him of manifestations of mentality concurrently with the formation of the em-

bryonic brain and nervous system. A third point of new departure to be considered now is birth. It must be one of nature's greatest benevolences that memory never carries us back to that episode of our life. Of course, we know that some of the sense organs are not active at the time of birth nor for many hours afterwards, so experience cannot be what it would be were they functioning at the time. But some of them—the organs sensitive to pressure, pain, temperature, and to kinesthetic and organic sensations—are doubtless ready to receive stimuli, and have been for many days. What a catastrophe, then, must birth be! What an ecstasy of pain, terror, surprise, insult, injury, and anger, and perhaps of achievement as well, must be concentrated in that first cry! Even though the experience does not live in memory, one wonders what lasting impress it may leave upon the organism. Does it affect the disposition and emotional tone of the individual? First impressions, psychologists tell us, are most lasting. Would an easy, rapid and normal birth, then, contribute to geniality and cheerfulness of character? Here is another psychosomatic problem deserving of investigation.

However that may be, the fact that birth is a point of new departure in the development of personality is perfectly clear. To write the story of this development subsequent to birth is an imposing task. In fact, book after book has been written upon child study, child psychology, child nature, and kindred studies. How sensations develop into perceptions, perceptions into concepts, and concepts into reason; how association works; what attention accomplishes; how memory and imagination function; how instincts develop into habits; how impulses get converted into volition; how

emotions develop out of primitive feelings of pleasantness or unpleasantness and out of instinctive responses, and how sentiments in turn come from emotions; and finally, how the combined standards of reason and emotion govern life's policies—this is the story genetic psychology has to tell about the individual. It is too long a story to repeat in detail in this book, although in a later chapter we shall attempt a brief sketch of the history of a personality.

Just now we are interested in seeing that John Doe's personality enters at his birth on a career of rapid development. The first onslaught of stimuli that greets him as he enters the atmosphere and as the atmosphere enters him is a great big "blooming, buzzing confusion"; light rays, sound waves, temperatures, pressures, and in a few moments, tastes and smells, all press with unremitting insistence upon his organism. Sleep, and lots of it, is his only escape from the world, which is too much with him from the first. The greater part of twelve years is occupied in getting these sensations sorted out and bundled together in stable groups, so that they always stand for the same objects time after time; in learning adequate responses to the more common types of stimuli; and in establishing the most intricate set of relationships to be found in the universe, namely, speech habits, both external in the shape of enunciation and internal in the shape of meanings. The acquisition of speech is without doubt the greatest feat of mechanics that ever transpired in the universe. No mechanism of physics or chemistry can hold a candle to the intricacies of the mechanics involved in a child's learning to say "dada" when he sees his father!

By the time John Doe is twelve years old he will, for the most part, have mastered his language, except

for the scholarly terms and concepts which he may have to acquire in later years when he is learning the technique of his vocation. Of course he may have to unlearn a good many of his forms of speech and English usages because of incorrect learning in the first place. Any college teacher of Freshman composition will dilate upon how many as long as anyone will listen to him. Likewise, John will have mastered his body; and many of his lifelong characteristics, such as his carriage, gait, posture, bodily habits, facial expressions, and the like, will have become fixed, or at least will be well on the road to fixation. Likewise his disposition and temperament, and many of his attitudes, will have become definite.

The basis of all this development, as indeed of all human learning, is the law of association. When mental elements, be they sensations, perceptions, or concepts, have been received in consciousness simultaneously or in close succession, a connection between them is formed, and the recurrence of one of them tends to revive the others also. It is to this law of association that we owe the transformation of the jumbled, helpless mind of the infant into an orderly consciousness capable of perceiving and effectively acting upon its environment.

Adolescence

And yet to suppose that personality in its completeness is established by the age of twelve would be an egregious error. For just as John Doe's character seems on the point of completion, just as his reflexes seem all to be finally conditioned, another tremendous upheaval of his psychosomatic organism comes upon him. This time it is adolescence, which comes along as the fourth

great episode in his life. Adolescence is primarily a somatic change, a physiological eruption which marks the completion of the dormant sex structures and functions. It can be correctly understood only as all the physical aberrations, from squawky voice to plain lubberliness, are interpreted in terms of the reorganization of the whole physique for sex maturity. The books on adolescence are full of descriptions of the changes which then take place in height and weight, length of arm and leg, size and strength of muscle, size and strength of heart, proportion of body volume to lung capacity, and the like. All this is interesting, and important, not so much in and for itself as for what it portends by way of revolution in the psychosomatic organization. The items just mentioned are somatic changes pure and simple; but they have profound psychological functions, using the word "function" in its mathematical sense of "a uniform and constant corresponding change."

The whole S — R mechanism of John Doe now undergoes a profound modification. A familiar stimulus, let us say the sight of a neighbor's girl, now means something entirely different, and his reaction will of necessity be entirely different also. No longer does he view her with his former aloofness, condescension, or disdain, but with a new interest and a most unaccountable attraction. The whole world looks different; it can now be used as a setting for a new kind of drama. In fact the focus of his interest has shifted ground entirely from the egocentric to the altocentric.

The old individualistic instincts which make a boy appear selfish now give way to the sex-social group of instinctive tendencies. New curiosities and interests supplant the old habits and hobbies. Now he is fodder

in the maw of the group mind; he is fit stuff to be swallowed by a gang. His games are no longer merely individually competitive; he seeks membership in teams and in the rough and tumble of football is learning the gentle art of coöperation. The beginnings emerge of something like real sympathy, and he becomes a hero worshiper. This is all "old stuff" familiar to everyone, either through reading or through first-hand contact with boys and girls of high-school age. And along with these changes arises a tremendous impulse in boys and girls to experiment with sex of which too the high-school teacher is painfully aware.

Intellectually, the adolescent is full of a new curiosity, a new skepticism, a new argumentativeness. He is eager to get some kind of a world shaped up in which to live, and he will be found to have some kind of a philosophy of life—what kind will depend largely upon what his environment has been.

Emotionally, John Doe is unstable during adolescence. He is subject to moods—one day on the top of the world, and the next in the depths; now full of "pep" and eagerness, and in another moment full of discouragement. All of these variations of humor and steam are correlated with the cycles of his sex life and interests. Furthermore, the adolescent is much given to musing on his "career," for every young person spends a lot of time projecting himself in imagination into the future to see what he would like to be and do in ten years from then. These dreams spring from the drive of instinct, from the welter of new sensations and new meanings and new social interests, and from the new world of thought into which he has but lately entered.

Interwoven with all of these new experiences is the

whole new problem of control, both individual self-control and submission to the control which society exercises over its members. Up until adolescence, morality has been a matter of blind obedience to authority. Now, authority by itself no longer suffices. John Doe insists upon forming judgments of his own.

In order to do this, he must work out some kind of a system of values for himself. And just here is where self-control prepares the way for social control, for, although the adolescent insists upon the right of individual judgment, he is uncommonly susceptible nevertheless to what the crowd is doing. His standard of judgment very easily becomes identified with majority behavior, so that whatever the gang does is right. In a certain high school, for example, the mores or customs of the group favored cheating; and when the graduates of this school went on to college they were surprised and chagrined to discover that this sort of standard did not go. To be required to revise the standard by which they ordered their conduct in this particular seemed like an unwarranted imposition.

In these last few paragraphs we have not pretended to give a complete life history of John Doe at any stage of his development. The precipitate derived from this discussion should be that the career of this individual, a type of all humankind, follows a certain teleological pathway. His psychosomatic career is the outcome of an upward thrust from the lowest level of life, through the intermediate levels, to the top; from fertilized egg cell to self-conscious personality. Personality is of course always an ideal, always still more fully to be achieved, and never altogether realized. But here is an organism with the possibility of becoming almost divine. Indeed, to effect a passage from the potential

to the fruitful is the prime function of the "will to be," the "will to live," the *élan vital*. The existence of such an urge can be accounted for, presumably, only by postulating an ultimate teleological nature for the universe itself.

The upshot of this great commotion called adolescence is self-consciousness. When the mental functions settle down after the eruption, we see, if they land in the right pattern, a fully revealed picture of the self-conscious level of life. I have spoken of self-consciousness as the culmination of the evolutionary process, the goal toward which development has been tending from the first in the drama of the universe. In like manner the terminus in the psychosomatic career of every normal child of Adam is the emergence of a self—a self which can no more be described by a behavioristic catalogue of reactions than a bridge by a builder's invoice. What this self is like we shall see in more detail a little later.

Contentment with a mere description of the stages of human development was not the purpose of this chapter. What it is necessary for us to see, and what these paragraphs have tried to illustrate, is that John Doe's personality is the natural and normal outgrowth of certain psychosomatic tendencies which were wrapped up in him from the first. The thing called sex instinct, for example, is not something acquired; not something experience can give; not something which one is free to have or not to have. Neither is social-mindedness, nor hero worshiping, nor a craving for a career, something to be put on or taken off at will. Each and every one of these and of all other fundamental characteristics of childhood and adolescence is a thing which ripens like a flower. They are

all a part of the seasonal growth of the individual. Of course, how sturdy the growth or how luxuriant will depend in part upon outside factors; but a peach seed never grows into a persimmon, and a born pugilist never makes a good pianist.

More Selective Synthesis

We have already referred to personality as the microcosm of the universe. Now a further development of that comparison presents itself. If we look at John Doe's career as a unity and compare it with that teleological process in the big universe around us, which we have called creative evolution, the parallel seems almost complete. The process of soul development seems an epitome of the age-long process of world building. In that mighty drama we saw points of new departure marking off from each other levels of life, mental life, conscious life, and self-conscious life. How is it in the case of John Doe? His career exhibits a parallel sequence. His life begins at conception; his mentality, with the development of the nervous system; his consciousness, when the outfit of sense organs at birth begins to function; and his self-consciousness is fully organized at adolescence.

We must beware, however, lest this description suggest that personality is composed of ingredients arranged in strata with hard and fast cleavages between them. On this hypothesis the soul is pictured as arriving on the scene at a specified or localizable moment of time. But that is precisely the notion which we are trying to get away from. Our diagram must therefore be interpreted as depicting logical and biological relations rather than mathematical or chronological sequences. The taproot of the soul extends

straight down through self-consciousness, consciousness, mentality, into rudimentary life. The ripe fruit of life is the soul; and if we give the word "spiritual" a broader meaning that it customarily has, we may say that the highest type of life is spiritual life. Of this I shall speak more fully later. It is enough at present to say that the goal of personality is spiritual life. John Doe recapitulates in his own career the evolution of the cosmos; for each of the major episodes in his life parallels points of new departure in the big universe outside.

Points of New Departure in the Universe	Self-consciousness	Adolescence	Points of New Departure in Personality
	Consciousness	Birth	
	Mentality	Nervous System	
	Life	Conception	

But personality is an achievement; it does not, like Topsy, just grow. It comes to maturity only as the result of conscious self-direction and discipline—self-education. For that matter all education is self-education; there is no other kind. Personality can be won only through sublimation of impulse and instinct into the will-to-be-educated, the will-to-be-cultivated, the will-to-be-socialized, the will-to-be-spiritualized. The winning of it requires us to engage in many familiar mental activities such as understanding, esthetic judgments, plans, decisions, and the striving for ideals. Books on psychology are full of descriptions of these processes, but seldom mention their function in life. This is another problem we shall look into a little later. Just now we are interested in the fact that the same conditions that bring personality on its top level

to birth are the factors that bring the soul to birth. After a period of unnoticed developing, like the petals of the rose in the bud, both personality and the spiritual life normally open out during adolescence into complete flower.

Just because John Doe is a member of the human race and has a very definite family heredity, it does not follow necessarily that he will come to "personal" maturity or maturity of soul. That will happen only as certain conditions are fulfilled. The formation of dew presupposes that certain conditioning factors must have been present, namely, a sinking temperature, moisture in the atmosphere, a cloudless sky, and an absence of wind. Given these conditions, the phenomenon called dew will appear. Similarly, certain conditioning factors, some internal and some external, must be present for the individual John Doe to develop into the person John Doe. What those factors are is our next topic.

X

ORGANIZING A SOUL

Consider the Inconsequential

AN "inconsequential" is an individual who has stopped just short of the completion of personality. Personality may be arrested in its development at any level: on the sheer biological level because of the defective structure and functioning of the body; or on the primitive mental level because of a lesion in the S — R mechanism; or again, on the level of awareness, association, and intelligence; or lastly, on the plane of self-consciousness. When the arrest occurs on the conscious level, popular language designates the individual as an idiot or a moron; when it appears on the self-conscious level, the misfit is called an "inconsequential."

But after all there are more normal than abnormal people as far as the lower levels of life are concerned. In consequence the arrest takes place most frequently at the topmost level, the self-conscious level. For this is the area where self-control and self-direction may normally be expected; the area in which individual initiative, devotion to ideals, and will-power ought to be operative. Cases of failure to perform these functions, exhibit the symptoms of inconsequentiality. With normal native abilities to begin with the achievement of personality can be thwarted only by a failure to use them to their fullest extent.

Let us for the sake of clearer understanding by the use of contrast make an analysis of one of these negative cases. To begin with, inconsequential have no marked abnormalities or defects, only subnormalities and deficiencies. Here is a description of one whom we will call Richard Roe.

Richard Roe has no defect of sight or hearing; he is not anesthetic to pain or lacking in muscular coördination, as is frequently the case with defectives. His power of association is good; so he can read, write, spell, and perform arithmetical operations. His memory is keen and retentive, and he has made progress in school. He was not caught by the Binet test or by any other test which is designed to discover mental weakness or incapacity. Indeed, he was graduated from high school.

Again, there is nothing peculiar in his appearance by which to identify him as an inconsequential. There is no physical deformity, such as malformation of the head or disproportioned features. He does not affect any unusual mode of dress or manifest any tendency toward slovenliness or untidiness. Indeed it would be difficult to distinguish him from the young gentlemen portrayed in advertisements of Arrow collars or Society Brand clothes. He is perhaps a trifle extreme in his tastes, but not out of mode. In his manners he is normal; he is conventional and polite when occasion demands, and even moral in that he does not transgress what "they" say are the moral limits.

Richard Roe is a clerk in a shoe store. During the noon hour and after closing time he may be seen mingling with other people, talking and laughing in a normal way. He is very fond of all forms of sport and is an habitual occupant of the bleachers at the ball park.

His nearest approach to defectiveness appears at such times, for his behavior, including his gestures and vocal jargon, seems quite abnormal and is wholly unintelligible to the high-brow person. But he is entirely harmless and is allowed to run at large.

You will have guessed by this time that by inconsequential I mean all those otherwise normal members of society who live in the present, are chiefly controlled by their sensuous impulses, and have no comprehensive purposes or plan of life—"those whose mental life is not organized in accordance with the scale of values which is recognized by the morally mature and efficient persons of the community."

He Lives for the Present

Of course there is an important sense in which all of us too live in the present, and in the present alone. This is the objective sense; the only moment of time which can be immediately experienced physically is *now*. But there is a subjective sense in which it is the prerogative of man to live in a temporal continuum, that is, in a state in which the past and the future combine with the present to form a dynamic and moving *now*. The past is combined with the present when we reshape the present to conform with what we would like to be and do a month or a year or ten years hence. Man, in contrast to the animal, may thus rise superior to the stream of time, if he will, and within limits, control it for his own ends.

The extreme of living in the present is found among the animals. None of them has a concept of time as consisting of past, present, and future, the future ever being eaten up by the present, and the present as constantly becoming the past. Animals do not possess

any unit for the measurement of time, or any power of localizing events either in the past or the future. No dog could know that it was two years ago last month that he came to live with his present master.

Young children also live in the present. A child of two and a half years cannot localize events in the past, nor has he any conception of the meaning of to-morrow. If he is hungry, instead of endeavoring to draw on past experience or to form plans to be executed a few moments hence, he cries until he is fed.

Of course it is impossible that any human being with a normal mental inheritance should come to physical maturity and remain as blind to the past and the future as the animal or the little child. He could not be normal and be totally wanting in the imagination which lifts one as in an airplane above the beaten way of life and reveals to him at least the dim outlines of past and future stretches of time. But there are people of mature years aplenty who have never developed much beyond the level of the child in their ability to realize the claims of the future upon their lives, who experience only the narrow circle of the present, and who are contented as long as it affords them comfort.

A man once gained considerable publicity by basing a moral philosophy upon this inadequate segment of time. He argued that the past is gone, and that the future is not yet, and is at best uncertain. The present alone is ours; it is now within our grasp. Let us therefore wring from it all the pleasure it can be made to yield. Since man is born for happiness, and happiness is but a name for the sum-total of pleasures, the prudent thing for him to do, and therefore his duty also, is to fill each succeeding now as full as possible with the most intense pleasures. Thus, he argued, a

moral obligation rests on us to satisfy our appetites with the delights of eating and drinking, of games and amusements, and of sex.

The founder of this school of moral philosophy was Aristippus, a Greek who lived some twenty-five centuries ago, and the doctrine is known as Cyrenaicism. However appealing it may seem at a certain stage of life, it has nevertheless long since been discredited. Almost anyone can point out its fallacies, and most of us recognize that it practically inverts the moral code of our civilization. But while in theory modern society repudiates Cyrenaicism, we have our Richard Roes who approximate in practice the pattern laid down by Aristippus. There are young men and women of good family and recognized social standing whose ideal of life is one continuous joy ride. Their mental vision is constantly focused upon to-night's show, the week-end excursion, the party next week. For them work is nothing but a means of existence between times, a thing to be endured; they live while they play. Here, then, is one criterion by which the inconsequential may be identified: he lives in the present; amusement in some form is his meat and drink, while work in behalf of a delayed end is to him one continuous source of irritation.

The Slave of Impulse

Another mark of the inconsequential is the control exercised over him by his sensuous impulses. Volitional action is action according to reason or principles; action which is part and parcel of a system of plans and purposes. Volition always decides in terms of future consequences.

The animal lives a life of instinct and impulse. An

animal never sits down to think what he had better do to-morrow; he never debates with himself what profession or line of work he had better take up, or what investment he should make. No dog ever decides to-day what he would like to have to eat for dinner to-morrow, or arranges with another dog to meet him on the corner lot at three to-morrow for a frolic, or chooses beforehand which particular female member of the species he will woo. Impulsive tendency and instinctive equipment dictate for him with the proper reaction to the occasion in each instance.

The trouble with Richard Roe is that his life is the product for the most part of the same general outfit of impulses and instincts that control the life of the animal or the little child. His impulsiveness is shown, for example, in his manner of spending money. He will pay a dime or a quarter for a palate tickler, a dollar for a thrill or a flash of color, irrespective of whether these things are of any real value. The sight of a thing in a shop window is enough for him to desire it, and a bargain counter is irresistible. His thought and conversation, of the back-fence variety, center about the great instinctive interests of life—food, sex, possessions, examples of crude humor, and sensational stories of moral indiscretion.

Again, as an inconsequential, he has no comprehensive system of purposes and plans for life. Like the animal or the little child, he lives a hand-to-mouth existence, contented and satisfied if fortune smiles, and complaining and restless if fortune frowns. He is in no sense the artificer of his own destiny, but is always a victim or a spoiled child of circumstances. Richard Roe's station happens to be in the so-called middle class, and he has gone through an apprenticeship to the

shoe business; but it is family interests and associations which have given an objective direction to his life, and he pursues the course laid out because to do so is to follow the line of least resistance. As for any compelling ambition in his own breast, there is none; he is borne along on the crest of the present, catering to his impulsive and instinctive caprices in so far as circumstances will permit. Some people are born with the capacity for self-direction, some achieve it, and others have life guidance thrust upon them from without, never achieving the capacity to guide themselves. These last are the inconsequential.

The rich furnish a plentiful quota of inconsequential; for they are both better fixed than any other social class to follow the doctrine of Cyrenaicism and the influences of their environment are particularly favorable to such a life. Life becomes with the rich inconsequential a continual round of pleasure seeking. Impulse and instinct have but to suggest, and the suggestion becomes a command with power to mobilize a retinue of servants and the whole machinery of modern luxury. The tragedy of inconsequentiality is most pitiable where the objective materials and forces which might contribute to the development of splendid, forceful and efficient personality are all at hand, and yet the subjective factors of self-control, self-direction, and an aim in life are lacking.

One other criterion of inconsequentiality remains to be mentioned. Richard Roe is immoral. Not in the usual sense, for he scrupulously observes all the social conventions and refrains from violating the social prohibitions—what are commonly known as the properities. He never does anything actually bad, and would deeply resent this charge of immorality. But he is

immoral none the less, for he has no real moral convictions. His standard is entirely derivative; he is governed by what "they" say, not by anything which can properly be called a conscience.

Real morality is a positive thing; it involves a definite attitude toward life and society, a definite group of ideals, a reverence for certain values. The most serious deficiency in the inconsequential is this lack of moral foundation, this moral immaturity, this canker in the bloom of life; for it is a question of character, not merely of behavior. Character is absolutely basic to that self-respect, that personal worth, that social value, and that practical efficiency which are found in a true personality, as contrasted with an inconsequential.

Consider the Person

So much for the negative side of the picture. Now how does John Doe achieve personality? What are the conditioning factors in that process?

There are three of them. First, in order to be a person, John Doe must live an historical life. History usually has a social process for its subject, but I mean by the term "historical" here the weaving together of one's whole life, past, present, and future, into a continuous and consistent whole, in sharp contrast to the zigzag, disconnected, self-conflicting life led by one who lives only in the present. Impulses pull this way and that way, often directly against each other. The way to live an historical life is to act as arbiter between these mutually contradictory impulses so as to hold oneself on the straight road toward some delayed ideal. One must have a system of worthy ends and scrutinize every impulse which arises to determine whether or

not it will aid in the realization of these ends; if it does not, he must redirect or "sublimate" it, as the psychologists say.

Let us consider the system of ends to which John Doe is pledged. He has studiously examined his tastes and capacities and has decided he is best fitted to become a physician. By imagination he draws a picture of himself as a successful physician, acquiring for himself and his family a competency and ministering to the needs of the community; a successful man, and one who is looked up to and valued by society. But to accomplish this end, he must have the very best medical training possible. This presupposes a college education, which, in turn, requires the choice of a college and a carefully planned course of study. In order to go to college he has to secure financial backing and find part-time work by which to help pay his expenses. He then has to arrange his schedule of how he will divide his time between study, class work, laboratory work, and for self-support. At length the daily grind begins. Each new day presents its own immediate ends which must be attained to make the attainment of the remote ends of his program possible. This day's chemistry lesson must be mastered that the next one may be understood, and so on, for the term's credit to be achieved. Here is a system of ends within ends, some immediate, others remote, yet all converging to an all-inclusive end and each a prerequisite to the next in the series.

But John Doe is human, and he does not remain unvisited by the same impulses and instinctive tendencies and desires that lead other young men with less clear ideals and less steadfast purposes off into the enticing bypaths of inconsequentiality. The difference

is that he scrutinizes these impulses and learns to say "no" to those which cut across and interfere with the accomplishment of his system of ends, both immediate and remote. While this road may sometimes seem hard and cheerless, it leads to happiness as well as to success, and there is no other road that will. Cyrenai-cism promises well, but it does not carry out what it promises; it leads nowhere but down blind alleys to inconsequentiality.

XI

ORGANIZING A SOUL (*Continued*)

Personality Again

By this time it must be quite evident that we are using the term "personality" in a much more closely knit sense than is popularly given it. How tall or short a person is, what the color of his hair and eyes, whether he is timid or bold, handsome or "plain," glib of tongue or slow of speech, whether he wears his clothes well or never looks dressed up, may all be more or less important indexes of that person's mentality or disposition. But they do not constitute personality any more than its upholstery and paint constitute an automobile. Whether or not one is efficient and skillful, possesses a well-coördinated muscular and nervous and a smooth-running habit system, are considerations which come a good deal nearer to the heart of personality, and yet they also are only manifestations of that deeper-lying life to which the term personality is here restricted. To get the right perspective on the stage of personality with which we are now dealing we must go back to the picture, drawn in Chapter VIII, of the emergence of the soul, and remind ourselves that personality is rooted in a sound biochemical organism; that it is correlated with a well-knit nervous system and an efficient S — R mechanism which through training has formed desirable habits

and skills; and that it is built upon the manifestations of consciousness known as intelligence and experience as a base. Personality is inclusive of all of these, and it is inclusive of vastly more. Richard Roe had all of these abilities and characteristics, and yet he fell short of personality. Personality implies complete self-consciousness; it can express itself only through the self-conscious functions of interpretation, appreciation, and volition.

You can of course think of these functions as forms of "behavior." But if we so designate them, you must then read into the term "behavior" so much more than the behaviorist claims to mean by it that the word becomes ambiguous, and therefore ill suited for general purposes. The fact is, the uniqueness and dignity of reasoning, for example, simply cannot be analyzed away by saying it is merely an internal speech mechanism. Reasoning may function by this means, and probably does in most persons; but such a definition of it is about as adequate as saying that eating strawberry shortcake is nothing more than a periodic contraction of the maxillary muscles. Reasoning certainly does implicate an elaborate psychosomatic mechanism in its processes, description of which we shall leave to the physiological psychologist; but the *significance* of reasoning is its *purposiveness*. Personality can no more be understood aside from purposiveness than the big universe outside can be understood apart from teleology.

And while it has been out of fashion for at least fifty years to talk about the "faculties" or separable powers of intellect, emotion, and volition, yet there is not the shadow of a doubt that psychology lost a valuable point of view when it gave up those terms.

The drift of "structural" psychology first, and later of behaviorism, was in the direction of a mechanistic philosophy of mind and away from a functional or purposive view. It requires some courage to suggest a resuscitation of the old terms "knowing," "feeling," and "willing," yet that is precisely what I should like to do; for I am thoroughly convinced that an honest-to-goodness analysis of personality cannot be effected without the aid of these concepts, even if we have to rename them.

The Functional View

In an attempt to achieve at least a partial compromise with the psychological mechanists, let us substitute the terms "interpretation," "appreciation," and "organization" for "intellect," "feeling," and "will," respectively. It must be admitted that "intellect," for example, does suggest some kind of limb or member of the mind, and that notion we have no interest in trying to resurrect; but interpretation can be regarded as a process and as a function, which is surely sound psychologically. And the suitability of the term is enhanced by the fact that implied in it also is direction, positive drift, a purpose, a teleology, which is precisely the factor needed to complement the one-sided account proceeding from the concept of mechanism. . . .

One wonders what a behaviorist would say were he asked why he writes books expounding behaviorism! Just more behavior that he could not help, I suppose. It is curious how he can get himself skewed around with his back to a whole flock of pertinent facts while he works out with brilliant ingenuity methods of tracing the stages in the conditioning of a reflex, and of

stalking the growth of a synapse, and of cataloguing one by one the associations and habit formations that go to make up that inimitable complex of stimuli and responses which he calls human behavior. He remains blind all this while to the fact that the whole web of human relationships is shot through and through with purposes, that behavior is always *for* something or other; but how does he do it? Every last one of us who has achieved any measure of personality at all, including the behaviorist himself, is behaving every hour of the day in the interest of ends of some kind. These ends are facts of life just as much as "dada" is a fact in the baby's life. Your aims, plans, purposes, hopes, aspirations, ambitions, policies, programs, and anxieties are as truly part of the paraphernalia of your existence as your conditioned reflexes. No explanation of them is possible unless the universe which has produced them is regarded as moving toward the accomplishment of some purpose. And it does not help any to try to laugh them away or to call them just more behavior. Just as well expect your automobile to crank itself and go round to the filling station for its breakfast, and then to the laundry for the family wash and call it automobile behavior, as to suppose you have "explained" why you got up and hustled through your breakfast, raced to the 7:49, and put in the day attending to one piece of business after another by saying it was just mere bodily behavior.

No, a genuine analysis of personality which takes account of *all* the facts must do justice to the function of interpretation as well as to its mechanics. It must likewise show the purpose of "appreciation" or the evaluation of values, and of "organization," or the shaping of conduct in terms of plans and ideals.

These three broad functions of self-consciousness constitute the very essence of personality. Those whom we designated inconsequentialists, who lack the foresight, the hindsight, and particularly the insight essential to personality are the only ones the limits of whose behavior are restricted to the level of instinct, impulse, and habit. Richard Roe failed to develop personality because he never even began to interpret, appreciate, and organize.

When mind is thought of in this functional, teleological way, it is seen to be a going concern; going in some direction, toward some objective; working toward some ideal end or system of ends. And human self-consciousness can be explained only in these terms, for apart from purposiveness mind would exhibit only mechanical behavior on the animal level. Where purposiveness and what goes with it are lacking, inconsequentiality results, no matter what the person's native abilities and aptitudes may be.

To make sure that we are keeping clearly in mind what we are driving at, let us remind ourselves of the real issues here. I have suggested that a soul is an acquisition, an achievement. And we set out to discover two things: first, what it would mean to achieve a soul; and second, by what procedure this can be done. Our major premise is the equation soul = the self-conscious level of personality. But if this is true, then the procedure for achieving a soul is identical with the process of becoming fully self-conscious. This sounds simple and seems on the face of it an easy matter. But as has also been pointed out, an individual may come to maturity without developing personality, and there are many people who slide through life on the level of inconsequentiality. So it is not

so simple after all; it is no light and easy thing to achieve a personality.

Interpretation

The functions of self-consciousness which must be developed to produce personality as we have listed them are interpretation, appreciation, and organization. Taking these up in turn, we may first ask what does interpretation do; what is its contribution to the sum total of the process of achieving a personality and a soul?

Since this is not a book on psychology, my answer must be very brief and confine itself to the gist of the matter. I may sum it up as follows: Interpretation does four things. The first of these is to participate in creating that sense of time to which some attention has already been given. Of course, the concept of time is based on thinking, but it does not grow out of thinking alone, for acting—behavior—enters into it as well. The consecutiveness of experience would not be discoverable apart from the undergoing of experience; and the undergoing of experience is as much a matter of response as it is of stimulus. Interpretation, then, is a time binder, forming the successive moments of time into stretches of duration, and thereby enabling us both to hold in consciousness and to deal with some part of the past and the future, as well as the immediate present. But interpretation is not the sole time binder; it shares this function with both appreciation and organization. In fact, these three functions are organic to each other, and always occur together and operate conjointly. Experience, however, may be predominantly interpretative at one moment, appreciative at another moment, and organizing at still

another. So it is reasonable to ask what interpretation does which is peculiar to itself. This leads us to the second answer.

Interpretation operates, in the second place, as assimilation; it is psychosomatic digestion. Let us again call to mind the behavioristic formula: S — R, Stimulus — Response. I have already commented on the fact that sometimes a stimulus leads on to awareness as well as to response. This yields the formula $S \xrightarrow{A} R$, in which A stands for awareness. But so long as one is aware of separate sensations the awareness is of little importance; it is only as sensations are assimilated and so combined into "knowledge" that they become significant. If this were a psychology book I would stop here and explain this process of assimilation in detail—tell how the rich data from the sensory mechanism gets worked up into a system of knowledge through association, and how this capacity of association also serves as the basis of habit systems, language, etc. One has only to consider the learning process of John Doe during the first twelve years of his life to get a vivid picture of this second way in which the interpretative process operates.

But interpretation is more than simply time binding and assimilation. It is also a directing process. Assimilation has yielded knowledge, an accumulation of psychosomatic energy which can be thrown into gear by the transmission mechanism called "will." But we have seen that the energy needs to be directed toward something before there can be real personality. It has to be steered, and thinking is the name applied to this steering function. Thinking is nothing more or less than a teleological process of "adjustment of means to ends in a problematic situation." Here is a young

man, for example, who has just completed a course in business administration. He has received two offers—one from a bank and one from a bonding house. They create a problematic situation. By imagination he projects himself into the future, “figuring” what his status is likely to be five or ten years hence, first in one and then in the other of the two positions, until he finally decides that the bank offers him the best prospect for a career. This process of imagining, of estimating, of “figuring,” of weighing—in a word, of thinking—is a steering process and is teleological to the core.

A fourth aspect of the interpretive process is the aspect obtained from the standpoint of result or product. The individual at last comes to have a system of knowledge or, at any rate, a point of view, certain attitudes of mind, something of a philosophy of life. Another way of putting this is to say that as the result of interpretation a person achieves an orientation of himself with respect to the world of nature, the human world, and the divine world, or the world of ultimate truth and value. Still another way of putting it declares that interpretation outfits the interpreter with a store of “cognitive” experience and of faith. By “faith” I mean that venturesome setting up of plans and ends for realization which every person always projects on ahead of the point “farthest north” yet reached by him. We are here getting over into the field of organization, for organization is impossible without the material to work with provided by these points of view, these hopes, aspirations, and hypothetical ventures, which give life its meaning.

Interpretation leads also to social as well as individual results. As an individual’s attempts to inter-

pret life issue in points of view and attitudes, so the attempts of groups of individuals yield group or social products. Society no less than the individual has its history; and the phase of its history which is most significant, but of which we hear least, is its intellectual development issuing in modern science and philosophy. There is a particular reason for mentioning this aspect of the subject here. The only way an individual can be sure his own interpretative processes are anywhere near the truth is to check them up with these social results of thinking. In other words, the only sure recipe for developing personality is to become socialized. This side of the problem we shall discuss in detail later on.

The interpretative process might be outlined in this fashion:

	Time: Past	Present	Future
	————— —————>		
Related phase of Interpretation } :	Memory	Perception	Imagination
Result:	Hindsight	Insight	Foresight

Interpretation thus binds the whole of life together into one time line. A life so bound together is an historical life. The important thing to remember is that an historical life has direction; it simply is not historical if it has no direction.

Appreciation

It is now the turn of appreciation, our substitute term for emotion or feeling in that older trinity—intellect, emotion and volition, or knowing, feeling and willing—to receive further definition.

We have had something to say of ends and values and objectives as determining factors in personality, but our present purpose requires us to subject them

to a bit of analysis themselves. To start with, our familiar S — R formula needs still another revision. The most primitive form of connection in the mechanism of behavior joins a stimulus and a response. At the level of consciousness a stimulus arouses awareness as well as a response. When this awareness as raw material gets worked over into interpretation, it becomes the steering apparatus employed in human behavior. And now we come face to face with the proposition that a stimulus sets off in a conscious being another process besides awareness, namely, feeling.

Our initial formula now becomes $S \begin{smallmatrix} \swarrow A \\ \searrow F \end{smallmatrix} R$, in which

F=feeling. On the lowest level of life, a response follows a stimulus immediately; but on the conscious level the sequence is $S \begin{smallmatrix} \swarrow A \\ \searrow F \end{smallmatrix} R$. Thus, for the small

boy a stimulus, let us say, a piece of candy (S), first arouses pleasurable (F) awareness (A); and the response (R) of reaching and eating follows. In conscious and self-conscious creatures, feeling plays as large a part in the determination of behavior as does simple awareness; in fact, the feeling element becomes a part of the awareness of the total situation to which the response is made. Psychologically, anything that gives satisfaction has value, but it is perfectly obvious that not all satisfactions are equally intense or lasting. As adolescence comes on and self-consciousness takes shape, the vagrant primitive feelings of pleasantness and unpleasantness become regularized and evolve into emotionalized standards of preference called sentiments. As his sense of time develops, John Doe begins to measure the present satisfaction against the future. If personality is really developing, he begins to take an interest in what will yield the greatest satisfaction in

the long run. The child lives in the present, but the adolescent begins to live for the future.

The function of appreciation in relation to self-consciousness is the comparison of satisfactions or, in other words, the determination of values. The question which now arises in each problematic situation is not only whether a particular response will bring pleasure or pain now; but also whether the response will have unpleasant after results even if the present result is pleasant. The problem is tremendously complicated by this added factor of the time element. The business of appreciation is to work out for its owner's guidance on the basis of experience a schedule of values which shall guarantee the greatest satisfaction in the long run. Lest someone with a Puritan background object that this is a hedonistic and selfish ethic, let me hasten to say that since personality is a psycho-social as well as a psychosomatic organism any schedule of values which is workable must therefore take account of the other fellow's welfare as well as one's own; and that one's own well-being in the long run not infrequently requires self-denial and self-renunciation.

Just how this schedule of values should be made out toward which personality must strive is a much-debated question; indeed, its discussion has gone on for a matter of twenty-five hundred years or more. But when we tabulate the results the kinds of values simmer down to about eight. At least that is the conclusion of Mr. W. G. Everett in his *Moral Values*, who lists them in this order: economic, bodily, recreational, association, character, esthetic, intellectual, and religious values. But ask yourself whether these values are ends in themselves, or means to some other end, and you will doubtless become perplexed. They seem,

in fact, in a way to be both means and ends at the same time, for they seem to have intrinsic worth, to be good just in themselves; and yet they also seem good because they lead to or make possible still other valuable things. And when we come to ask what the end term is in any series of values, the one thing for which all other items in the series are desirable as means, we shall probably not be able to name anything more definite than complete living in a superlative degree, and this is not a "thing" at all, but a certain stamp of personal life.

One more word, to sum up, about appreciation. The whole point of this discussion will have been missed unless supreme importance is attached to this proposition; namely, that appreciation is not merely a mental or verbal affirmation that certain responses have greater value than others, but an honest-to-goodness *preference* for those values which are judged to be of most worth. It is of no use to talk about the superior merit of a Beethoven sonata and at the same time turn on the radio jazz at every opportunity; or to discourse on the superior worth of good literature and then read snappy stories. Appreciation involves a partisan stand as well as an exhibition of logic. When you come to analyze a sample inconsequential the chances are fifty-fifty that he has a low "A. Q." (appreciation quotient) as well as a low "I. Q." People with a low "A. Q." are simply emotionally immature; for a complete personality demands a set of cultured preferences.

Organization

One more modification in the S — R formula must now be made to make it an adequate symbol of per-

sonality. As the development of John Doe approaches the level of self-consciousness, and as awareness becomes transmuted into interpretation and feeling into appreciation, the interval of time between his responses and the stimuli which evoke them tends to increase greatly. What happens is that an elaboration takes place in the primitive nervous set-up which is apt to make the response something quite different from a simple S — R sequence. The formula now becomes $S \begin{smallmatrix} \swarrow A \\ \searrow O \\ \nearrow F \end{smallmatrix} R$, in which the O represents organization. The old psychologists used to refer to this conscious selection of the response to be evoked by a given stimulus as "will," while more recently the term "volition" has won favor.

But whatever term is chosen for this step of the process, we must understand that the unique part of human behavior, that portion of it which sets it off from animal behavior, is the element of *organization*; organization in terms of principles, laws, and concepts on the one hand, and on the other in terms of ideals, emotionalized standards, and values. When Joe Doe sizes up his abilities, canvasses all the circumstances, the possibilities, and decides to become a physician, he is busy organizing his conduct. And at each step in the working out of this purpose he must make decisions, inhibit impulses, work up steam and tap his reserves of psychosomatic energy in doing so. His aspirations and ambitions supply the propelling power; but will has to throw in the clutch first to start the organism going, and then to keep it going at a steady rate to its destination under the guidance of reason.

In other words, personality demands initiative as well as drive and guidance. Not a few inconsequen-

tials are to be accounted for by the fact that while they have perfectly good interpretative ability and perfectly fine ideals, the clutch by which to throw the necessary drive into gear is out of order. They always loiter in the beautiful land of intention, but never get around to delivering the goods. Defective skill in organization is the disease from which they suffer.

Personality then, while rooted in those functions carried on by the body mechanism, grows by pushing its way up into mentality, then through consciousness to self-consciousness, at which level it flowers out into its fully developed form.

Now that our picture of the soul is completed we can see how far we have left behind the hazy traditionalism and the childhood theology which speak of the soul as if it were some kind of ethereal substance or essence, a ghostly spirit or a gossamer shade, installed ready made in a bodily habitation, there to remain for a season.

On the contrary we have talked of soul in terms of what can be observed from life. The soul is life, the highest level of life. We have examined the mechanistic substructure of life. We have considered the usefulness of impulses and instincts and the formation of habits and language. We have explored the working of intelligence and rationality. We have woven into our concept of the soul the sense of time which makes a life a history. We have dealt with the principles and laws of interpretation; its insight and foresight, its assimilative and directive offices, its creation of points of view and attitudes, its purposiveness and powers of unification. We have set forth the functions of appreciation; its consciousness of ideals and sensitivity to values, its intelligent preferences

and aspirations, its hopes and faiths. We have made a diagnosis of organization, and its power first to throw and then to hold the clutch in gear by which the drive needed to put things across is prevented from going to waste. Soul is life with all these self-conscious functions on display. The soul of John Doe is his rational life, his moral life, and his spiritual life—all three combined. All the mechanism of his physical body, of his sensory experience, and of his mentality, is incorporated into a larger synthesis at the point of new departure where self-consciousness breaks forth. John Doe, member of the human race, reënacts in his own life the drama of that age-old cosmic process called selective synthesis by which the universe itself has evolved.

The soul is not something dwelling apart from life and mind and personality; it is all of these at their best. It is life conscious of itself and of its relations to ideals and values to God and the universe. All life is behavior, meaning adjustment to some extent to the environment, but spiritual life is superior adjustment to the *total* environment, to the whole range of reality. The soul of John Doe is a personality, mature enough to be self-consciously more or less adjusted to the physical universe, to human society, to the realm of ideals, and to God.

XII

THE HYGIENE OF THE SOUL

Education

As we have already seen, personality is an achievement. There is nothing inevitable about its advent; it is not a happen-so, but self-directed volition is responsible for its creation. If John Doe is not to drift into becoming an inconsequential, but is rather to join the ranks of those fortunate human beings who exhibit the attributes of a spiritual life, he must help work out his own salvation. The process by which personality is achieved is education. Consequently, if John Doe acquires a soul his education will have to shape one for him. To any old-line orthodox thinker this will come as a hard saying. And yet, stand a soul against the background provided by biology and psychology, and the conclusion is justified that soul is always an outcome of an individual's evolution; and that although a human being starts from a point determined by heredity, the route which his development will take will depend on his education.

But to say that education denotes the process by which souls bud and bloom is to presuppose a certain definite philosophy of education. The widespread notions that education consists in learning, that knowledge is its chief result, and that reproductive memory is the chief mental function involved in getting an

education will not fit into the conception of it here championed. From that point of view a clear distinction must be drawn between education and training. To be sure, nothing is more natural than to suppose that the way to become educated is to attend an educational institution; but there is not the least necessary connection between such institutions and the education we have in mind. In fact many of them are organized so as to give, in practice, training of the most specialized sort instead of a well-grounded education.

Education as here conceived is the process of developing a historical life as the core of personality; it is the acquirement of increasing skill in interpretation, appreciation, and organization. Education has to do with the time sense, insight, values, and life policies. It leads to comprehension not of facts merely, but of principles and laws as well. It arouses and feeds the ability to think. Education means expertness in discriminating between points of view and the attainment of a working philosophy of life. Training, on the other hand, develops specialized habits and skills. It is the acquisition of technique; it creates facility in the use of tools—dental drills and burs, or scalpels, or sextants, or telescopes, or test tubes, etc. Education and training often keep one another company; but no guarantee at all can be given that a man who is receiving training is at the same time becoming educated; neither does it follow that one who is undergoing the growing process called education is at the same time getting any kind of specific training. Training is merely the behaviorist's substitute for education. To establish relationships between particular stimuli and particular responses is its sole object.

If you were to look over the curricula of the institutions of higher education you would probably be astonished to find how large a percentage of the courses are intended to provide training, and how few are definitely and consciously intended to educate. Both training and education are necessary; training as an essential means of making a living, but education as a necessary means of making a worth-while job of that living. That is to say, education is what provides men with souls rich in capital for living. From this it is plain that education is not limited to the schools; indeed, more of it goes on outside than inside their halls. Many college students, therefore, manage to get educated in spite of their college work. It would contribute immeasurably to the efficiency of our educational institutions if those who administer them could all get clearly this distinction between education and training.

But even granting that an institution is definitely and consciously aiming to provide education instead of mere training, it does not always follow that the institution succeeds in developing all-round souls. For a catastrophe has befallen higher education in these last years. The field of knowledge, tremendously expanded as the result of the use of the scientific method and the invention of instruments of precision, has been divided and subdivided and divided yet again into numberless little specialties, and so far removed are these from the actualities of life, so divorced are they from true insight and fundamental values that knowledge often ceases to perform its true functions.

All education as here conceived would be religious education. For insight into world mechanism and world teleology at any point is a liberalizing, broaden-

ing, i.e. soul-incubating process. But even institutions which were designed most specifically in the beginning to give this very insight and to develop in those in attendance upon them a point of view—notice, I say *a* point of view—singular and not plural—even they now follow the general practice of departmentalizing instruction to such an extent that it scatters and disorganizes the mental outlook of the John and the Jane Does who make up the vast population of the colleges and universities of the country.

Developing a soul in John Doe involves the expansion of his whole personality, and especially of its highest self-conscious functions. Education, whether formal or informal, is effective in the degree that it expands these interpretive, appreciative, and organizing abilities. The outcome of interpretation is insight into the physical world, into the world of life and mind, and into the world of self-consciousness. Insight, when it comes to a man, reveals to him something of the unity and inner meaning of the universe; something of the processes by which it operates; something of the worth and aims of men as individuals and as societies; something in the way of purpose and direction in the cosmic drama; in other words, something of the content of the mind of God, even though that mind be infinite. Add now ideals, aspirations, standards of value, motives, and ambitions which correspond with this interpretation of the universe and of man, and to cap it all well-thought-out plans and objectives by the student for his own life, and you have real education pictured. Personality is the embodiment of all the highest values that have been inserted into the cosmos. In its growth and expansion personality actually achieves the impossible; it lifts

itself by its own boot straps. It mounts the steep grades up the hill of becoming by using the elastic bands of imagination to hitch itself to the next higher landmark as a snubbing post. This attainment of self-chosen ideals is education; furthermore, it is religious education. *All* real education is religious education. It is not necessarily education in religion, but this may, however, very properly form an element in it. Education is the making of personality. And the transforming of the potentialities of John Doe into a personality brings his soul to the birth.

Religion

Hygiene is a system of regulations for the promotion of life on the physical level. The whole psychosomatic life is likewise responsive to a completer set of similar regulations. When we wish to refer to the hygiene of self-consciousness, that is to say, to the hygiene of the soul, we employ the word religion. For religion in its best sense provides the régime under which the psychosomatic development of human personality goes forward most smoothly and completely.

This point of view is expressed in a current definition of religion widely approved, as follows: "Religion is the endeavor to secure the conservation of socially recognized values through specific actions that are believed to evoke some agency different from the ordinary ego of the individual, or from other merely human beings, and that imply a feeling of dependence upon this agency." *

A careful reading of this definition will note the five main terms of central importance to its meaning, namely, conservation, socially recognized values,

* W. K. Wright: *A Student's Philosophy of Religion*.

actions, agency, and dependence. Now, the "hygienic" interpretation of religion recognizes the fact that religion conserves values in the life both of the individual and of society by linking these lives to the purposes expressed in the universe to the extent in which these have been discerned. But I should like to go a step further. Religion is more than a means of conservation; it seems also to play the part of the violet ray and to stimulate psychosomatic growth; it is vitamin-like, for without it the soul is bound to grow stunted and dwarfed. We have already identified the world of values which came into being with the appearance of humankind as the teleological goal of the universe on the plane of self-consciousness. Now, when evolution reaches this stage it is no longer "blind," for human organisms may now intervene in it and "hustle history," if they will, by organized self-control, that is, by setting up ideals of value through the exercise of imagination, and then realizing these desired ends by the invention of appropriate ways and means. Among all the incentives urging men toward spiritual self-improvement, the most potent is religion.

Perhaps what we have been discussing all this time may seem no more than plain morality. For morality, too, is a kind of apparatus of control. And perhaps religion only properly comes under our survey when the "agency" upon which we are supposed to be dependent is introduced into the picture. Whether or not anyone can have a religion without a God is a question. Some thinkers have claimed that one can; but the author quoted a moment ago apparently believes otherwise. And if the picture of the universe which has been under construction in this series of discussions is anywhere near the truth, I suppose

we shall be inclined to agree with him on this point.

If you will read the definition once more, you will see that it can accommodate itself to both an objective and a subjective, both a social and an individual, interpretation of religion. Objectively considered, religion expresses itself in the form of social institutions, organizations, and practices; in churches, temples, communions, priesthoods, creeds, rituals, sacraments, ceremonials, and services. No one in recent years has written so entertainingly and authoritatively regarding this side of religion as Lewis Browne in *This Believing World*. But while these objective manifestations of religion doubtless conserve many species of socially recognized values, and do constitute an important part of the social inheritance of John Doe, we are more interested in laying bare the inner, personal side of religion, for it is religion as personal experience which is more intimately involved in the development of his soul.

Religion of course is a rather broad term, embracing a number of world movements. Among these are Brahmanism, Buddhism, Judaism, Christianity, and Mohammedanism, as well as religions no longer alive, such as the Greek and Roman cults. A complete philosophy of religion would have to take all these into account. But for our purposes in telling the story of the soul of John Doe, the discussion of religion may safely be limited to the subjective side of Christianity. In fact, it might be better to limit it even further, and speak of the religion of Jesus. More and more is being made these days of this distinction between Christianity and the religion of Jesus by thoughtful students of religion. They have come to realize, largely through

the light thrown upon Western civilization by a close study of its origins, that there may be a world of difference between the system of thought and action which has sprung from the threefold root of Hebraic religion, Greek philosophy, and Roman organization—the system which we call Christian civilization—and the simple religion of Jesus. Furthermore, there is a considerable movement whose rallying cry is “back to Jesus” as the only hope of saving Christianity. War, for example, is quite Christian; at least, Christianity has always practiced warfare, often as a holy enterprise. But war is very unlike Jesus. Of course, it is conceivable that Jesus may have been wholly mistaken as to what constitutes good hygiene for the soul; nevertheless, it would seem as if his professed followers in the age-long upward struggle of the human family might give his way of life a fair trial. I am very well aware that the implications of his teaching are not altogether clear, particularly its social implications. But a study of the recorded utterances of Christ discloses three fundamental assumptions in his thinking.

Three Principles

The first of these assumptions is that God is a personal being. Jesus always talked of God as Father; and fatherhood means nothing apart from personality. Naturally he thought of the human family as God's children. We have here an example of one of the unique characteristics of Jesus; namely, that principles which we other human beings have been at age-long pains to infer from extended observation and experience, he assumes to start with. An earlier chapter of this book, for example, was devoted to an attempt

to show the rationality of this belief in the Fatherhood of God which was taken for granted in the thinking of Jesus. It might seem almost an impertinence to try thus to prove that Jesus was right were it not for the fact that it is some consolation to the tough-minded individual to learn that this assumption, and the other two, likewise, is in entire conformity with all well-founded deliverances of the modern scientist and historian.

The second basic assumption in the thinking of Jesus is that personality is the ultimate value in the universal system of values. Human personality—or soul if you like—is the end term for him in the series of things of most worth. Whereas it is the thing by reference to which every other value is good, its own value is intrinsic; it is not good because it pertains to something else, but good in and for itself. Here, again, an idea arrived at by our labored elucidation of the teleological processes of creative evolution is immediately grasped by Jesus as self-evident. If insight be the test of the philosopher, then Jesus was a master philosopher. It is curiously interesting to discover that modern bio-chemistry, psychology, education, ethics, and sociology, and all their offshoots, do but confirm the teaching of Jesus concerning the soul; and that the principles of spiritual hygiene only in recent years pieced together by these sciences are to be found in simplified and concentrated form in a few of his very plain statements. If anyone is looking for proofs of the deity of Jesus, I would point him to these profound insights rather than to the alleged miracle in connection with his birth.

The third assumption in the thinking of Jesus is that God meant men to live together here on earth the

highest kind of family life. The religion of Jesus is to be thought of as the supreme way ever proposed to promote a triangular set of relationships, with God at its apex, individual personality at one, and society at the other, corner of the base. In the center of the triangle Jesus took his stand, linking the indi-



vidual personality to God on the one hand, and God to society on the other. For Jesus was both the perfect pattern of personality and the exponent of a perfect social order. Religion for John Doe thus means the constant maintenance of certain intimate relationships with God and with society—relationships expressing themselves in reverence and aspiration in the one direction and in measures of coöperation in the other.

Reverting to Jesus' idea of the Kingdom, I am literal-minded enough to believe that he meant precisely what he said when he prayed, "Thy Kingdom come, Thy will be done on earth as it is in heaven." And I imagine he desired this happy state of affairs not for our enjoyment as an end in itself, but rather as a means to another end, namely, the boundless development of personality—soul—in the members of society. I fancy Jesus would not give his approval to the doctrine that the state is the supreme end of human achievement, to be fostered at the expense of the individuals of which it is constituted. As I understand him, his argument was that the Sabbath and other institutions were made for man and not man for them.

The Kingdom, according to Jesus, organizes human life together here on earth on a basis quite strange to our Western way of thinking. The failure of Christian civilization to adjust itself to its ways is the great-

est item in the indictment against it of disloyalty to Jesus. He taught that the cementing principle of all right human organization is Love. His second great commandment was, love thy "neighbor" as thyself; and he included among our neighbors all those whom we have any opportunity of benefiting, whether they would be considered, according to the world's standards, friends or enemies. At present "Christian" civilization appears to organize our life together upon the basis of the predatory instincts. Government, industry, and international and inter-racial relations appear to be honeycombed by fear, suspicion, hatred, envy, jealousy, pride, and a desire for dominance. Jesus would presumably reorganize pretty much all our ways of living together upon the basis of mutual respect, coöperation, and good will; and make the fundamental law for man the Golden Rule.

The present status of the home is proof of the fact that a social institution will remain most stable and in good working order when it is organized upon this principle of Jesus. I am not one of those hasty pessimists who believe that the American home is disintegrating and on the road to utter destruction. I should not be at all surprised to find that its apparent break-up at this moment is the initial stage in a reorganization of this institution upon an approach to the higher level suggested by Jesus in his third assumption. The new home would then satisfy more completely than its predecessor did the needs of human personality. Even now, of all human institutions the home is the one in which life together is carried on closest in accord with the idea of Jesus; we can pick out in every neighborhood dozens of homes in which the active principle of the home life is love, producing a

community of will as contrasted with the older and now unworkable principle of a community of obedience based on tyranny. But where Jesus' ideal of a community of will is operative, whether it be in the home or in any other institution, there you have the nearest approach to a perfect society.

Just what the specifications would be for the reconstruction of human society in conformity with Jesus' teachings, is indeed a bit difficult to imagine. How could the coal industry or the steel industry or transportation or banking be so reorganized that all those engaged in one of these occupations should be living together upon the basis of love and community of will? Or what specific changes would have to be made in our policies with respect to the negro, the Japanese, or the Russian to put them upon this basis? One thing is clear. Just as in the home, so in the wider forms of institutional life, love would generate a community of will as a substitute for a regimen of dominance and coercion. After all, does this not seem like a true exemplification of the democracy which we so loudly profess and fall so far short of realizing in practice?

If John Doe, then, is to give proof that his nature has absorbed the essence of the religion of Jesus, love must do the umpiring in the settlement of all questions concerning his proper conduct toward God and toward other persons. Personality in the other fellow is always to be thought of as an end in itself, and not as a means for the enhancement of one's own personal welfare.

XIII

THE HYGIENE OF THE SOUL (*Continued*)

Conversion

It is one thing to talk about religion from the side lines, to philosophize about it, and quite another thing to experience it. Again, participation in certain religious ceremonies, like going to church and singing hymns, is an altogether different matter from undergoing certain subjective changes in personality which fall in the category of spiritual or religious experience. In ordering a soul for John Doe it is necessary to prescribe not only doses of philosophy about religion, but ten times more important is that he be put through generous sample experiences of the thing called religion, not only in respect to its objective social but also its subjective and personal processes.

Moreover, it is nothing less than imperative to realize that religious experience is not abnormal, womanish, or a weak capitulation to something unreal. On the contrary, religion, as has been suggested, is the hygiene of the soul, the one means by which to acquire and maintain health of soul and the healthy-mindedness which goes with it. Of course this may demand that our concept of religion be subjected to revision to make it conform to the non-traditional concept which we have reached of the soul itself. But in this reconstruction of our philosophy of religion, we must

not empty the meaning out of certain time-honored nouns which have been employed these many centuries to stand for great religious experiences.

One of these is conversion. I have as little patience as anyone with certain good old notions about conversion, such for example as that the necessary setting for conversion is a mob-mindedness worked up systematically to white heat; that the state of mind out of which conversion springs is an hysterical emotionalism artfully kindled by fervid oratory; that repentance consists chiefly in regret for the past, rather than initiative in reform; that religion is renunciation chiefly; that the attainment of a mansion in the skies is the main motive for seeking salvation; that sins can be washed away only by the blood of Jesus; that incidentally you will be forced to believe something that is Greek to you; that the good Lord performs his part in the process only for Jesus' sake, and so forth.

But because these formulæ move and live and have their being in another world of discourse from that of present-day history, astronomy, biology, psychology, sociology, ethics, not to mention radios, Kiwanis clubs, and patent-breakfast foods, is no indication that conversion does not remain an absolutely basic fact in human experience; nor that it does not retain a correspondingly important rôle in the spiritual development of John Doe and his kindred.

What, then, are the facts about conversion as it normally occurs—facts which need not be ashamed to look a psychologist in the face?

In the first place, conversion normally occurs during adolescence. Whoever is interested in figures and statistics about it, and in introspective accounts of its differing forms, should read E. D. Starbuck's *Psychol-*

ogy of Religion. But if anyone interested simply in learning what scholars regard as the gist of the process will recall his own experience of conversion, he will recollect that it came as the result of his own inner criticism of himself; that is, unless he was so unfortunate as to have been put through one of those reason-stifling, mob-pressure conversions characteristic of the typical revival-meeting. In that case this work of criticism may have been done by way of suggestion from outside. In any case, the initial stage of a real conversion is self-criticism. It takes its inception in a low appraisal of one's own past history obtained from an air-man's view, as it were, of the road over which one has so far come and its general direction or lack of direction, and of what the future holds in store along the same route. Adolescence we know is the time at which the budding self-consciousness opens out; and conversion is one of the turns in its unfolding. The immediate occasion of it may have been the hearing of a moving sermon, or a beautiful musical composition, a view of the Grand Canyon, or the experiencing of a heavy sorrow, a serious accident, or a remorseful consciousness of "sin."

The evangelist of course plays upon this last string, for he knows well that the mind of the adolescent not infrequently harbors a morbid sense of guilt quite out of proportion to the real merit of the case. But the common factor in all genuine and lasting conversions is a deprecatory self-criticism or self-appraisal incident to the maturing of self-consciousness. In this reading of the situation the absence of conversion is a sign of immaturity; in fact, that the personality in question is a bit defective. If anyone feels this to be a harsh saying, let me point out to him that the number of

honest folk is legion who have undergone this torment of self-criticism and the other phases of the conversion process without going through the stereotyped and traditional procedure of the sawdust-trail-tabernacle, and who do not therefore profess to have experienced so orthodox a transformation.

Conversion is a Positive Process

But if conversion is thus a perfectly normal process, and not some supernatural metamorphosis of the soul, what are its distinguishing attributes?

First, let us agree that conversion is at once a positive as well as a negative response. I am perfectly willing to think of it as a "conviction of sin" if it is agreed that by sin we mean the thing that happens to a dog when he yields to the call of the wild—a case of reversion to type. Interpreted in this way, a conviction of sin is certainly the outcome of that process of self-criticism which we have just been discussing. There is always the call of the wild in the environment of every son of Adam, and the marvel of it is that more of us do not revert to type.

I am perfectly willing to admit, too, what I know every orthodox preacher insists upon, that sin is a terribly real thing—not merely the absence of good, as darkness is the absence of light. But this admission holds good only in the sense that since human beings are tremendously dynamic, their energies will find outlets in purely instinctive and therefore often harmful activities unless they are directed by compelling ideals. Nothing, I suppose, is intrinsically bad. One of the worst outrages that has ever been perpetrated in the name of morality is the doctrine that sexual intercourse is intrinsically bad—a doctrine fostered and promoted

in some quarters of the Church. Sexual attraction is perfectly normal, human, teleological, and divinely ordained; hence it cannot be intrinsically bad. Sex can be perverted; it can be exercised under unwholesome physiological conditions, induce vicious psychological attitudes, and become a sociological nuisance or worse. Sin is thus reversion to an instinctive or impulsive type of behavior in disloyalty to the claim of ideal ends. This means that conversion is a "coming to," a waking up to a realization of the futility and the aimlessness of what has been going on in one's life for some time past.

Seen from its other and more important side, therefore, conversion is a positive process for providing the bankrupt one with an ideal objective in life. If the process of conversion be carried to its proper conclusion, the constructive imagination is called on to work out a program for the future. I am not speaking now of immortality, but of the next five, ten, or twenty years of life here and now. The question of immortality deserves a thorough discussion, more thorough perhaps than we shall be able to give it; but this is not yet the place for it. It is enough here to say that conversion is conversion *to* something new as well as a weaning away *from* something old.

The question then simmers down to this: To what was John Doe converted when he went through that experience? To me the right answer to this question, although very simple, is tremendously far-reaching. John Doe was converted to the way of life advocated by Jesus. Of course I realize that hosts of men have testified that they were converted to a complicated theological scheme called orthodoxy, which probably involves a good many beliefs and practices about which

Jesus knew nothing. Other hosts have followed the way of Mohammed or of Buddha or of other seers and prophets. But as for John Doe, "getting religion" meant to him discovering by pragmatic tests the way of life which would prove most efficacious in the development of personality and of the Kingdom of God. He is a disciple of Jesus because of all the programs for complete living, both personal and social, the way of Jesus to him stands out as the most adequate.

So in the case of John Doe conversion to Jesus' philosophy of life, a philosophy based upon the triple assumption of the Fatherhood of God, the supreme value of personality, and love as the law of the Kingdom, seems both positive and real. Furthermore, from this point of view conversion may denote a process as well as a cataclysmic event. We have been in the habit of thinking of conversion as a lightning change which occurred at twenty-seven minutes after nine o'clock P.M. on such and such a date, something which goes off all at once like a firecracker. When it does it is supposed to be all finished. But if conversion denotes a positive developmental process there is no psychological reason why its progress may not be gradual, and capable of being represented graphically by a curved line mounting upward as conversion progresses, resembling, for instance, the curve of learning which psychologists employ to picture how one learns to operate the typewriter.

By close observation of the process of learning psychologists have discovered the existence of plateaus of learning, that is, of successively higher levels of efficiency as measured in terms of speed and accuracy, reached from time to time. In similar fashion suc-

cessive levels of the spiritual life may be mounted, like stairs, as new insights, new inspirations, new motives develop in one's thinking and appreciation. Perhaps this is just what old-time theologians meant by growth in grace, but it makes the process more real to us to state it in terms familiar to modern science and philosophy.

We are now prepared for a more intimate analysis of the processes involved in conversion. We have dealt with the top functions of the self-conscious level of mind under the headings interpretation, appreciation, and organization. If religious experience is organically interwoven with these areas of consciousness, we should be able to search out relationships between them and conversion.

The Top Functions in Conversion

As a matter of fact conversion is a process of reinterpretation, or perhaps indeed an initial form of interpretation. What actually dawns upon the adolescent mind at conversion is the meaning of his life, in relation to his own career, to the lives of his fellows, and to the universe about him. Of course, no adolescent ever reaches the summit of philosophical comprehension, but he does get a new grip on life and experiences the rise of an ambition to put himself in harmony with the rules of the big game. The whole process of interpretation, appreciation, and organization undergoes reinvigoration and fresh coördination in the course of the conversion experience. New insights, new value-concepts, and new plans, purposes, and objectives become fused into a more intricate web of self-consciousness called spiritual life. Good will, sympathy, coöperation, benevolence, and love now replace fear,

cupidity, jealousy, suspicion, and selfishness as the basic motives of life.

Lest someone should conclude that I have left God out of the transaction and would picture conversion as an episode wholly confined to the individual's own mind, let me say that I should be entirely willing to think of it as a divinely planned and superintended process. Indeed this would be quite in harmony with the teleological view of the universe and of personality which I have been presenting from the first. The point at issue is the claim even yet made by not a few "sound" religious thinkers that John Doe and all his ancestors are totally depraved. This means that conversion denotes a cosmic cataclysm, an act of intervention on the part of God comparable to making the sun stand still. In my view conversion is a natural, seasonal change in the life of personality comparable to seedtime and harvest in the life of other organisms. Nor do I mean to imply that conversion is as inevitable in the life of any individual as his conception, birth, and death. Conversion is one of the steps in a long, long quest for a developed soul in which nerve and determination and persistence and constant reorganization are needed to carry on. Its consummation is a supremely significant event in the life of John Doe, for conversion makes him a veritable "child" of the Father. By it he is inducted into citizenship in the kingdom.

Prayer

An attempt to say anything really worth while about prayer in ten pages is an audacious undertaking. But religion simply cannot live and breathe at all without prayer; consequently it would be futile to try to give

an account of the hygiene of the soul without emphasis on this vital necessity in religion.

Two erroneous notions about prayer are so commonly current that it is difficult to trace them to their origin. One is that everybody prays. I doubt it! I knew a carpenter once, the father of one of my boyhood chums, who was a very profane man. He could scarcely carry on an ordinary conversation without swearing. The end came very suddenly for him one day, when a scaffold on which he was working gave way and threw him thirty feet to the ground. Since then his devout wife has always taken great comfort in the fact that the moment the scaffold started to collapse, he uttered a fervid "O God!" She takes this to have been probably a prayer, and that all the sins of his whole life were forgiven by the good Lord between the uttering of that "prayer" and the moment he struck the ground and lost consciousness. But I doubt it. For it is not likely that lifetime habits of expression and lifetime attitudes of mind and heart ever change so completely upon such short notice. Here was a man then who probably never prayed; at any rate, he claimed to be an atheist during life. And I imagine there are plenty of people not as aggressively skeptical or cynical as he, it may be, but nevertheless as completely thoughtless and heedless of the finer values of life, who are equal strangers to any tendency toward prayer. Let us class them also among the inconsequential.

The other common notion, the accuracy of which seems to me doubtful, declares that prayer is a "dominant desire." Dominant desire may have no necessary relation to God at all, nor to any system of values. The main characteristic of the inconsequential seems

to be a dominant desire for sensuous gratification and satisfaction. A movie moron has as dominant a desire as any missionary. Prayer is probably intercession in the interest of a dominant desire, but not all dominant desires enlist such intercession. So prayer seems to me to stand in need of more discriminating analysis.

Again, there are exercises that often pass for prayer which appear to me to be lacking in its very essence. Many "prayers" are simply "behavior"—mechanical responses automatically set off by familiar situations. Prayer-meeting prayers are often of this kind. I know one dear old lady who goes over the same formula week after week; I could recite it for her any time myself. Other "prayers" are didactic discourses designed to instruct the Almighty. Some preachers give the Lord a review of world affairs in the Sunday morning prayer, and tell Him what ought to be done in behalf of members of the waiting congregation. While these deliverances may take the form of prayer as far as language is concerned, they seem lacking in its most essential elements.

How the Psychologist Views Prayer

If we must have a definition, suppose we think of prayer as an attitude expressive of reverence and dependence toward an "agency different from the ordinary ego." It is usually accompanied by attempts at the translation of its need or adoration into language, but the meaning of prayer may be fully experienced in the absence of any consciously phrased petition or praise. For this reason the statement is frequently made that prayer is an attitude. The first sight of Niagara Falls or the Grand Canyon may be said to evoke nothing more in reaction than a psychosomatic

attitude, a mental and physical posture. Whoever found himself unable to translate this experience into words without the use of such terms as "wonder" and "awe" at the marvel of it and "veneration" and "reverence" for its source, it is likely, crossed at the time the threshold of prayer.

Whether the mind can think without the use of language has been a moot question in psychology for many generations. The net result of the debate seems to be a conclusion that thinking always involves the use of symbols of some kind, either word symbols or image symbols. Since all prayer except "attitude prayer" involves thinking—strange as that may sound—we may be fairly sure that prayer when carefully analyzed does in most instances involve at least internal speech.

But aside from our interest in the inner apparatus of prayer the leading questions for most of us concerning it are: What is prayer for? What effects does it accomplish? How does it accomplish them? In answer, two quite opposite theories have been advanced. One would have us believe that prayer is a peculiar form of conversation with the Almighty in which the man engaged begs for some benefit; and that the disposition which the Almighty makes of the request is determined by the degree of faith behind the request. If even as slight a trace of faith as a grain of mustard seed be present God will, if necessary, intervene enough to remove mountains, cure disease, send rain, or cause floods to abate. The reason more answers of this kind are not received is alleged to be that men merely go through the motions of praying but do not really believe their spoken wishes will be granted. Nevertheless no assumption is more common than that there is some kind of merit in praying for the widow and the

fatherless, the sick and the bereaved, for those caught in flood and famine, in perils on land and sea, and even those who are out of work or suffering financial reverses.

The theory underlying this point of view is that when circumstances warrant it in His judgment God will arbitrarily set aside meteorological laws here, biochemical laws there, or the laws of gravitation yonder. All that is necessary, indeed, to obtain these interventions is that John Doe shall register a unique, personal request with a sufficient degree of faith. So much for the literalistic view.

At the other extreme is the pragmatist. He holds that prayer is a way of giving the mind good ventilation. It is a process of mustering all one's resources, of pulling oneself together, of putting new fire into one's interest and determination. Prayer is self-meditation, carried on ostensibly as conversation with an unseen companion. Prayer has no efficacy beyond its reflex effects upon the one who prays. "Whatever helps the bridge builder, the engineer, the farmer to a divine life, makes possible a stronger bridge, a safer train, a better harvest."

Our principal interest lies in discovering what view of prayer and what form of its practice is best calculated to promote the growth of John Doe's soul. Does the literalistic view square with the balance of our knowledge concerning it; or does the pragmatist's interpretation hold out the more promise? Or will some synthesis of these two widely different views serve our purpose better still?

As I have studied John Doe and tried to understand his relationships with the world in which he lives, it does seem as if a synthesis holding these two *anti-*

theses within its embrace would answer best to his needs. We know too much about science to give complete credence to the literalist; at the same time human experience, it must be admitted, is richly strewn with the genuine fruits of prayer. What point of view, then, shall we take?

Perhaps the following analogy will help us to an insight into the true nature of prayer. Here on the one hand is the airplane, on the other the law of gravitation. Gravitation operates universally to keep heavier-than-air objects snugly nestled down on the earth. And yet, when we put what we know of the properties of fuels, the expansion of gases, and the power of electricity into the making of an internal combustion engine to come to the aid of the atmosphere in its task of lifting this ton and a half of dead weight, we can fly our heavier-than-air machine over the oceans.

Has the law of gravitation been destroyed, suspended, or violated by the aviator? No. Gravitation has simply become a coördinate member of a group of laws, all functioning simultaneously to carry out a task assigned them by human reason. Would it have helped any were Lindbergh or Byrd able to wave a wand and suspend gravitation over the region through which their plane wished to pass? Hardly! What would then happen would be that the planes together with their operators would be smashed to smithereens and the pieces cast to the remotest corners of the universe. No, you cannot run airplanes and get along without gravitation, and all the other laws that hold the universe together, and make it a going concern.

What does this analogy suggest to us about the nature of prayer? Is prayer a demand for intervention which will destroy, suspend, or violate existing law?

Are answers to prayer received which successfully defy gravitation, bio-chemical or meteorological law, economic or psychological law? Not for a moment! One instant of capriciousness on the part of God would be the end of everything. Respect for natural law can be banked on as being the basis of all God's providences to man. To that extent we can all be fundamentalists. But prayer goes beyond the workings of physical and chemical law, for it is a teleological process in which a whole coterie of other laws are engaged and utilized for ideal objectives. Personality is a social, a moral, and a spiritual as well as a psychosomatic organism, and forces operative at all these various levels can, and for some people actually do, so co-ordinate and become focused upon ideal ends as to enable these ends to be achieved.

How It Works

Let us recall briefly—for we have not the time to go into detail—some of the basic psychosomatic forces at work in lawful ways in the human organism, namely, the interlockings of internal glandular secretions and intelligence, and conversely, of suggestion with digestion and all somatic functions; the interlockings of emotional tone with almost superhuman skill, of purpose and memory, of mood and creative artistic work; the interlocking of influence between one person and another; the interaction going on between social inheritance and character, and between social pressure and conduct and belief; the mental coloration caused by propaganda and the hypnotic effect of crowds; the invigoration that comes from faith and the tuning up of personality that comes from worship. If secretions, suggestions, emotional tone, moods, purposes, social

pressures, mental coloration, faith, and other forces, some of them perhaps unknown to us, at work in lawful ways in personality can be focused by prayer and co-ordinated in unprecedented ways in the interest of an ideal value, is it too much to expect an "answer" transcending the ability of "human" power minus prayer to accomplish? And who shall deny that God takes advantage in his answers to prayer of these "natural" ways and means. By prayer a man is making more effective use of these forces than otherwise, and in lawful ways. A bystander may call these exceptional results reflex effects if he wishes, but he will not be overthrowing our account of them. It is simple good sense to remember you did not make the rules and to abide by them and win the game.

Because we can point out a variety of interlockings which coördinate in the formation of dew, does that make dew any less real? Or is it therefore unnecessary afterward for its formation for all these conditions to be present? There must be a lowering of temperature, a cloudless sky, a still night, and a surface losing its heat easily through radiation so that it becomes colder than the surrounding air; if any of these conditions are lacking, the phenomenon does not occur. Likewise, in order to be successful in obtaining certain exceptional results, prayer seems to form one of the conditions which cannot be dispensed with. The key words in our definition of prayer on page 167 point to the essential elements entering into its contribution: reverence, a feeling of dependence, a consciousness of an agency other than human, a feeling of need, and, possibly, an attempt to voice the attitude in language spoken or silent. Under these given conditions the "other than human agency" responds not capri-

ciously but by an interlocking seemingly not otherwise realizable of the laws that the physiologist, the psychologist, the sociologist, the ethicist, and the religionist know and describe in their several sciences. Prayer is one of the lawful ways and means by which spiritual life comes to maturity.

What kind of things may one pray for legitimately? When hardly a day passes without the announcement of some fresh inroad upon the impossible it behooves us not to be too cocksure here. Prayer for most material benefits and selfish purposes accomplishes possibly no more than its reflex effects upon the suppliant's nature; it is difficult to see how it would have any effect, say, upon the weather. The legitimate sphere of accomplishment for prayer, of course, is the realm of personality. Whatever affects the welfare of personality or society falls properly within the scope of prayer.

Faith

Prayer and faith are organically related; at any rate prayer, if our diagnosis of it is anywhere nearly correct, is unthinkable without faith.

In his book *Faith Justified by Progress* H. W. Wright defines faith somewhat as follows: Faith is the conviction that ideal ends of personality can be realized. Conviction, ideal ends, realized—these are the key terms in the definition, and they take us back immediately to our three functions of self-consciousness. Conviction is a close neighbor to interpretation, ideal ends a product of appreciation, and realization the consequence of successful organization. Faith itself therefore turns out to be but a natural synthesis of those threefold functions of mind on the self-conscious level.

Taking them in more detail, let us start with convic-

tion. There is a good deal of talk going the rounds to the effect that it does not make much difference what you believe so long as you live right. At first this sounds easy. But the question should immediately arise, How is one going to know when he is living right? Can one just go along on his way keeping in step with tradition or crowd opinion or popular sentiment? In a word, does a person live right when he conforms to the prevailing mores? Anyone who thinks it over will see that at best this would soon reduce both social and individual life to a dead level, and really lead to degeneration, for habit always tends to slip back toward the primitive, a reversion which we have already declared to be identical with sin.

Again, are we to understand that right living means living according to the Bible or to some creed? If so, whose interpretation of the Bible? Or whose creed?

The fact is right living is an impossibility apart from right thinking. A chief factor in the outfit of a life which is to be guided by faith is therefore a developed thinking organ which can work out for itself a platform of convictions, a collection of beliefs. It is of the very essence of the thing called faith that its assent shall not be verbal, but that it shall have convictions of its own. Credulity may swallow the deliverances of some other mind, but not faith. Faith is not "believin' somethin' you know ain't so," but belief in something on which experience, if not logic, compels you to bank. Faith is a form of certainty which, while it transcends actual proof, is based nevertheless upon sound, rational footing. Reason is the foundation, faith the superstructure.

But faith is composed of other ingredients than conviction; hope, aspiration, yearning, desire enter into

it. In a word, faith is feeling or emotion as well as conviction. It is captivity to some ideal end; not simply theoretical approval of this impersonal objective, but the championship of it signified in a warm, out-reaching gesture of longing desire. Faith is that yearning for the ideal ends or goals of personality which makes one willing to branch out in their direction. "Stepping out on faith" is an apparently reckless willingness to make a venture prior to proof that the thing sought can be won. Actual operations begin before any sign of demonstration can be given of the success of the enterprise: operations based upon the kind of certainty faith supplies of course and guided by one's best judgment, but nevertheless a venture. Too often faith has been thought of as solely a cognitive process; stout belief even in the face of contradiction as far as the actual is concerned was its essence. But our analysis shows it to be broader, bigger than that. It is composed not of one alone but of all three of the soul's activities—interpretation, appreciation, and organization.

Doe's Profession of Faith

When the question is raised as to just what articles a declaration of faith should contain, we are facing an intimately personal problem; for, as pointed out a moment ago, what any person truly believes must be the outcome of his own thinking. Here is the source of the differences between people in their philosophy of life. One man is a materialist, another an idealist; one a fundamentalist, and another a modernist. Just what point of view a given individual will maintain will depend upon his native intelligence, his social inheritance, his educational opportunities, and his

handling of his past, inner, personal experiences of success or failure, joy or sorrow. Sound convictions result from a combination of open-mindedness and straight thinking. Nor is it easy for any person to be sure that he is not prejudiced or biased. The finest kind of courage is required to look oneself squarely in the face and criticize what one sees there honestly and fairly. As pointed out in the discussion of conversion, rudimentary self-criticism is a prerequisite for anyone who wishes to begin to live a regulated life. And now it is equally plain that skill in self-criticism is also the beginning of valid conviction, inasmuch as thinking which is not heroic enough to check itself up unflinchingly will not long remain sound. Open-mindedness and tolerance are thus the starting-point in any interpretative process which can hope to issue in a philosophy of life containing enough of the idealism and high potential to make it worthy the name of a living faith.

A profession of faith for the John Doe whose genesis we have been describing, consisting of a half dozen major premises or basic convictions from which he would always start in his efforts to solve the particular problems of his life as they arise, might be formulated in this fashion:

That his stature of soul, the poverty or wealth of his personality, on the self-conscious level, is determined by the faithfulness with which he observes the laws of its hygiene;

That God, the infinite Father, is an absolute self-consciousness, whose mind in regard to the making of the world is mirrored in the principle of evolution;

That Jesus Christ represents the peak of self-disclosure on the part of God in human history;

That Jesus' own life may well serve as a personal

model and his program of life in the Kingdom as the true pattern for a perfect social order;

That although no date can be set, both these goals are possible of achievement:

That love is the most workable principle of social organization, and the way of love taught by Jesus the only road to happiness both now and hereafter.

John Doe, to be sure, may be way off the track, and most certainly he has not arrived at the full truth; but nevertheless, from infancy through childhood and adolescence and on into maturity, the shaping of his point of view has reached this culmination. The pendulum of human thought in the past century has swung back and forth from fundamentalism to agnosticism at the other extreme, and more recently it has made the return journey from agnosticism through mechanism and idealism to modernism. And in the process it has given up successively inspirationism, rationalism, empiricism in favor of an attitude of critical reflection. At present the brief profession of faith given above is perhaps a fair summary of its concept of the soul in its individual, its social, and its spiritual settings.

Fortunately for him, Doe's psychosomatic processes were healthy from the first and his growth and development followed a normal curve. Most wisely, his training was deferred until his mental growth was completed. His was the rare good fortune, besides, to attend a college where he came under the influence of a genuine religious educator—not an educator in religion merely—who gave him the maximum of assistance in getting his bearings intellectually. As a result his experience was that of a progressive conversion, enlivened

by that genuine consciousness of the inner presence of the Father which is the essence of spiritual life. Under such circumstances, a compelling faith is about the only outcome possible.

XIV

DOE'S DESTINY

What Is Immortality?

THE reel of Doe's biological, his psychological, and his spiritual career has now been shown, and the various episodes in the making of his soul have been retraced for us. His story has been told in terms familiar to physicist and biologist as well as to psychologist and religionist. Soul has been identified with personality at the self-conscious level. Here we deal with life at its present apex; self-consciousness is something unique. On this level, life begins to work in a new material, life itself becomes spiritual, and religion comes into existence.

The question which next presents itself is, Now that Doe's soul has begun its march, where is it going? Is it a flame fated simply to flare for a while, and then be snuffed out? What happens to John Doe at death?

We are not the first to ask that question nor to speculate on the aftermath of the next great episode in our present existence. Two really significant answers have been offered. One is the blunt assertion that death simply ends everything. When the wax is used up, the candle goes out, the flame disappears, and that is all there is to it; re-ignition is impossible. No one imagines that somehow or other the flame reappears in some invisible form which goes on and on burning forever. When a flower has died, it is dead, and that is

all there is to it. No one imagines that some invisible shadow of it goes blooming on and on throughout eternity. Man is like the flower of the field; to-day he is and to-morrow he is not. Even the fragrance of his life, which lingers a while in memory, soon becomes dissipated and lost.

This, then, is a cold-blooded, deceptively obvious position which can be taken with respect to the soul's destiny after death—simply to assert that it hasn't any. But the majority of the human race have never subscribed to that theory. Those who acquiesce in it often abandon it when brought face to face with the death of an especially beloved friend or relative. Of course, the bare fact that at the grave of a friend we quite universally fall back upon belief in some sort of continued existence for him, does not turn that imputed existence into a reality. Nevertheless, the fact that humankind so universally hopes for and aspires to and believes in "life after death" is a phenomenon which would in itself challenge analysis, even though we had no personal stake in the outcome of death ourselves.

The no-destiny theory is opposed, therefore, by a competing theory that the soul is immortal. These are the two more significant Western points of view. But perhaps the fact is worth mentioning that the East shows a fondness for an attenuated, washed-out doctrine that the soul at death loses its sense of personal identity and merges into a sort of world-soul, as a rain drop loses itself in falling into the ocean. The individual soul drops back into recoalescence with the Infinite Being which produces, absorbs, and reproduces all individual existences in an eternal cycle of becoming, being, and dissolution. The elements composing a soul are never destroyed, but all trace is lost of the

individual whose identity is no longer preserved. I do not know how you feel about it, but if this is all there is to immortality I confess to a good deal of difficulty in getting up much enthusiasm for it.

Whoever cares to consult the books that deal with the question of immortality will find a good many different definitions of the term. Some of them will tell you, for example, that John Doe is immortal in the sense that his personality lives on in his children. He projects his being afar through heredity; he has a kind of biological immortality since the life stream flows on from him as a fount to an indefinite number of future generations.

No objection is likely to be raised to belief in this kind of immortality as far as I can see. Indeed, most of us take it for granted, but if that were all there was to immortality I imagine no one would become greatly thrilled over it. The fact is, this view of immortality scarcely calls for discussion here. It may be interesting to the biologist to speculate about how the reproductive cells act as carriers of an unbroken, and therefore everlasting, continuity of life; but this is scarcely the type of immortality John Doe is interested in when he contemplates the question of what death will do to his own person.

Next comes "social immortality," such as Cæsar and Alexander and Napoleon and Shakespeare and Pasteur achieved—an immortality of fame by which a man's influence lives on generation after generation, and his memory is cherished as a permanent part of the social inheritance of a civilization. In a lesser way, the influence of less illustrious personalities also lives on in this same sense that it molds the characters of their respective children and friends at any rate, and they

in turn mold those of still other friends, and these still others. As a result, the life influence of every individual can be rightly represented only by a wave ever widening out to infinity.

No objection again can be raised to belief in this kind of immortality. There can be no argument about it; everyone is immortal in this sense whether he wants to be or not. What John Doe is concerned to know is whether the soul which he has acquired as told in the preceding pages is immortal; whether his self-consciousness persists so that he will still be conscious after death of his own consciousness, and aware of his own identity. The crucial question after all for most of us, around which debate concerning immortality centers, is this, Does or does not recognition of personal identity continue after death?

Who Is Immortal?

In our social inheritance as Christians there is a kind of inevitableness, a kind of fatality about our concept of immortality. The mention of the word evokes in us a simple attitude of mind which is, however, tremendously hard to analyze. When put into words it seems to mean that soul is a kind of ready-made filler or essence which was presumably inserted into the body at some crucial instant. Although as received it is, in a state of pristine purity, the body into which it is introduced is inherently wicked, or even totally depraved; so the soul is bound to be subjected to a certain amount of smutting merely from contact with its soiled container. What happens to the soul from that moment of installation depends upon how the religious exigencies which beset the individual are handled. If he comes under conviction of sin and is converted,

divine grace restores the soul to something like its original purity; and if the individual can remain in that condition, all is well with his soul, for it is headed toward eternal happiness. But if the individual never experiences this regeneration, or becomes a backslider, his soul is variously consigned—depending upon the brand of theology—either to purgatory or to eternal punishment.

Either way the aftermath of life is an immortality no matter how one may live. This attitude which we are trying to analyze seems to be fairly obsessed with the notion that every last son of Adam will have immortality thrust upon him whether he wants it or not, and regardless of his desert. If he does not deserve it, still it will be conferred upon him in order that there may be time enough in which to punish him for not deserving it. Now, granting for the moment the truth of the hypothesis that a continuance of personality at its self-conscious level after death is a possibility, the first question that challenges my thought is, *Must* we think that John Doe under any and all conditions is immortal?

The reader will probably suspect that the thesis that the soul is an achievement, advocated in Chapter X, is sharply at variance with this traditional attitude which we have just been discussing, that constitutes part of our Christian social inheritance. In that former chapter we took the position that the soul keeps step in its development with the development of self-consciousness, with its enlargement and the rise and operation of those functions which we have named—interpretation, appreciation, and organization. But on this hypothesis here and there individuals crop up who do not develop these functions but drift into inconsequen-

tiality, and their spiritual life comes to a standstill before it has fairly started. Such individuals are religious morons or spiritual defectives; their souls are comparable to unfertilized ova. Consequently, the hypothesis that souls are achieved, that they grow and develop and are not ready-made fillers or essences injected into the body at some crucial instant, sets those who adopt it face to face with the question, How could immortality mean much of anything to a given individual whose development has stopped short of personality on its top level? In other words, if our theory that a soul is an achievement is correct, does it not follow as a corollary that full immortality is also a thing to be achieved?

Let us suspend judgment for a moment while we review some of the conditioning factors on which this hypothesis is based. Personality, it has previously been pointed out, grows up around a life with a history as its core, that is, around a life holding in the embrace of its consciousness a past, present, and future, all bound together by a program of ends and purposes, a hierarchy of values, and a code of interpretative principles. Man can rise to the stature of a time binder; and whoso does not live the present moment in the light of the past and future lacks knowledge of his own history, and consequently is lacking in personality. Only an organism with a remembered past, which can be consciously and continuously reconstructed under the stress of the present, possesses the material required to fashion for itself the plans and ideals out of which a worth-while future for itself can be built. Immortality would be worthless to it without such a future. Full immortality, therefore, under this hypothesis will fall to the lot only of the individual who with

foresight and premeditation will use it to carry out his plans for the expansion of his personality.

The winning of full immortality, likewise, is a perpetual process of education, using the word in its literal sense of a drawing out, a luring forth to new conquests of the principal functions of personality at its top level—interpretation, appreciation, and organization. Otherwise a case of arrested development occurs and an incipient soul simply remains dormant.

On this same hypothesis, the other processes of soul-hygiene—conversion, prayer, faith, and socialization—are also essentials in the winning of full immortality. No doubt this account of the matter will prove entirely acceptable to those who have been brought up in traditional orthodoxy, as they will probably identify it with the winning of a heavenly crown by the saved. It may not prove to be as acceptable an equivalent for their belief in an eternity of torture in hell for the unsaved.

The reference above to the socialization principle perhaps calls for a word of explanation. The socialization of the individual in the language of educators and social scientists means the process of shaping the young candidate into a fit member of society through all the range of its institutional forms. From the standpoint of religion the term can mean but one thing, namely, "selling" the program of the Kingdom to him; "selling" it to him so persuasively that he will adopt it as his own with enthusiasm. This socialization angle to the problem of how the soul reaches maturity even the preachers have too frequently entirely overlooked. But if Jesus was right in his point of view, it would seem to be a matter that should be of prime interest to them.

The Difficulties

Before going any deeper into the implications of our hypothesis that immortality is not an interloper but indigenous to the cosmic process, perhaps we should consider more specifically some bona fide difficulties in the way of belief in the persistence of personality.

To start with, defining personality as a psychosomatic organism enables us to turn our backs upon the difficulties of the old dualism which saw mind and body not only as two and not one, but as opposites in qualities. This dualism raises more problems than "psychophysical parallelism," "interactionism," and "epiphenomenalism" will ever be able to solve. Yet there is no denying that for orthodox theology with its thought of the soul as a ready-made filler or essence imprisoned for a time in a tenement of clay, the old dualism is not altogether embarrassing. Trouble arises for it, however, when a request is made for an account on dualistic principles of some of the psychosomatic facts of life, such for example as the effect of the endocrine glands upon intelligence and disposition, or conversely the effect of faith and prayer upon dyspepsia. These relations demonstrate the existence of a unity between the mental and the physical quite unsuspected by dualism; a unity to which interactionism, psychophysical parallelism, or epiphenomenalism are totally unprepared to adjust themselves.

But while the psychosomatic theory certainly does stereoscope these two aspects of life together successfully as far as earth is concerned, still it does at first sight seem to put a trying hurdle in the way of immortality. For it asserts that personality, and all its manifestations, present a twofold aspect, physical, as well

as mental; that all psychological processes of adjustment are organically bound up with neural, bio-chemical, and bio-physical phenomenon. And the question arises, How can a soul with these antecedents immediately continue to function in the absence of those organic processes which death destroys?

This is the first and in fact it is the all-inclusive difficulty. Take the other questions commonly asked in this connection, such as, How could life exist without a body, or mind without a nervous system? If soul is to know no end must it not also have known no beginning? If so, where did it spend the eternities prior to its sojourn on earth? Where are heaven and hell, and what do they look like? These and many others besides are secondary questions which will all answer themselves once the primary one is disposed of satisfactorily. How could the soul continue in communion with the somatic functions, which are an integral part of personality, disintegrated?

Death Another Point of New Departure

There is no denying that we are here confronted with a real difficulty. In order to surmount it, we must see what hints of a way out may be gained from a brief resurvey of the ground we have already covered.

In our description of the career of John Doe we singled out four conspicuous points of new departure at which selective synthesis stepped the organism up on to a new level. Whenever all four are passed through in normal fashion a personality is the result; otherwise, either life itself comes to an end or the development of the organism is arrested at some level below that of matured personality. To name them, these points of new departure are the advent of con-

ception, of a nervous system, of birth, and of puberty, distinguished, respectively, by the accompanying emergence of the first traces in turn of life, of mentality, of consciousness, and of self-consciousness. Now, self-consciousness arises only in its turn after the other stages in the evolution of personality have been safely negotiated. Soul is therefore by origin organically related to those previous levels of life. So when the issue is raised as to the destiny of whatever it is that has already climbed up or been pushed up to life on the self-conscious level, a natural thing for thought to do is to run through the normal phases of the development leading up to its present estate to see whether any suggestion can be gleaned from its past career as to its future.

The observation is a matter of everyday experience that death apparently is the normal terminus of any and every psychosomatic career. Sheer naturalism takes the point of view that it does end it, and nothing more is left to say. On the other hand, a normal man finds it almost impossible always to take the bare, naturalistic point of view of the phenomenon of death. He may think he thinks that way about it as he reads of famine or flood victims in Asia or South America; even a physician perhaps may so regard it as he watches the life of one more patient ebb away. But when death has just struck closer home, or he has had a close shave himself, a man commonly begins to show himself much more hospitable toward one or another concept of immortality. The old habit of remaining non-committal may successfully resist this tendency; but in the failure of such inhibitions to do so the normal course taken, at least by men raised in our civilization, seems to be to credit life with the power of self-continuance.

Now, what can we make of it all? In the light of our blue print of the cosmos and of what we know about the career of John Doe, what is the chance that whatever it is that has pushed its way up to self-consciousness will continue to carry on after death? This is no idle inquiry, and its prosecution no easy task.

In entering upon it, be it remembered that at each of those points of new departure placarded in our blue print of the cosmos something new emerged showing that the principle of selective synthesis had scored again; something that could not have been foreseen had come to pass. Not simply one more variety of the same thing, but a new set of qualities and functions came into existence in the new order of things. The fresh synthesis was creative in the strictest sense of the word.

In the same way, the points of new departure in the life of the individual—the advent of conception, of a nervous system, of birth, and of puberty—are all of them signalized by the appearance of entirely new attributes of the organism. Enacted as it has been, billions of times before, nevertheless the synthesis each time always produces a different result; each human being is unique. It should be borne in mind, also, that at no previous stage in the life of any individual was prophecy possible of what would take place next.

Our question about immortality, therefore, becomes a query whether death may not itself be a point of new departure in the career of whatever it is that has pushed its way up to life on the level of self-consciousness in a psychosomatic organism. May it not be as unique an open door in its way as was conception? After each reorganization to which these points of new departure have served as gateways, the new qualities and new

functions which appeared could scarcely have been more strikingly different. If death be another of these revolutionary points of new departure, something as strikingly different is to be expected as the next episode in the career of whatever it is that has pushed its way up into life on the level of self-consciousness. The severance of the physical, chemical, and neural ties which have bound it hitherto to its soma surely satisfies this demand for something so astonishingly different as to be well-nigh unimaginable. But the fact that imagination cannot figure out just what the circumstances of this disembodied life may be, should not be a serious obstacle in the way of faith.

Moreover, in the face of the naturalistic view of life and death, the suggestion forces itself irresistibly upon our minds, from time to time, that life after all is a spiritual enterprise. Leading physicists of the day are intimating that even matter itself is pure energy and essentially immaterial. If the subject matter of physics, chemistry, biology, and psychology be differing transmutations of a single primary energy, the inference that whatever it is that has pushed its way up to life on the level of self-consciousness can carry on in a disembodied state is not so unthinkable. Again, if the hypothesis holds good that God is self-conscious personality or Spirit, the notion that John Doe's personality may similarly continue to subsist in a form invisible to us may not be so far off the track.

Assembling all these considerations and balancing the "pros" against the "cons," John Doe might now add to his profession of faith one other item, to wit:

That the ongoing of personality—the soul—is not cut off by death. Death is, instead, a point of new departure which will open up to the soul a

new and superior form of life; that immortality connotes circumstances in which personal and social evolution may continue untrammelled by the tasks of overcoming the inertia interposed by a material environment.

Faith is not a blind hope, nor an unfounded conviction; it is the essence of things hoped for, the evidence of things not seen. Faith, again, denotes a point of view, a philosophy of life, a scheme of values, and a program. John Doe's belief in immortality is not simply an academic matter; he has staked his life upon it. That is, he has so pointed and ordered his life that it will be a preparation for it, provided it is a cosmic reality. And in the process he has sacrificed an indefinite number of particular pleasures and gratifications along the way. But these he has dismissed gladly, in the conviction that greater length and breadth of life is the goal most worth aiming at. Indeed, he could not have squandered away his life on these lesser values and at the same time have saved his soul.

XV

FAITH VERSUS AGNOSTICISM

Is Proof Possible?

WE have already subjected to a critical review the plausibility of agnosticism as a point of view in regard to matters of life and death. The outcome of our deliberations was a conclusion that the mistrustful attitude of agnosticism is neither sound nor desirable. On this question of the destiny of the soul the unsoundness and undesirability of agnosticism become still more patent. A normal man is simply not content to face any major issue of existence in this negative frame of mind.

Nevertheless, no matter how insistent the demand for demonstration and certitude, or how ardently we may hope that we are on the verge of obtaining it, in the matter of immortality we are almost sure of final disappointment. As far as I know, a demonstration is not within the range of possibility. The philosopher, Immanuel Kant, pointed out once for all the impossibility of proving immortality by the operations of pure reason. We have to do here with one of those great concepts which lie outside the realm of possible present experience; and which therefore cannot be proved, since proof rests upon data obtainable in experience. By the same token, however, neither can you *disprove* immortality or the existence of God. Since these pos-

tulates lie outside the range of the experience possible to us at present, it ought not to be affirmed either that they are certain or incredible. Which all seems fair enough.

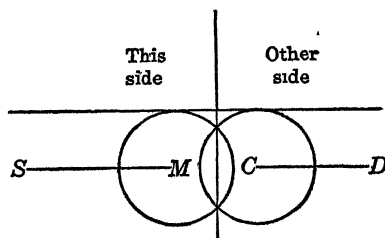
What Kant did not emphasize with equal force, though it is equally true, is the fact that all knowledge, even that regarded as proved, is more or less hypothetical. Most of us have at least heard of Einstein and of relativity, a theory which stamps the approval of science upon the idea that truth is a variable matter of relationships, and not of absolute invariables. That is to say, what we shall accept as objective fact, even as the result of scientific experiment, varies, for it is determined largely by what and where we are, and not, as had been supposed, chiefly by the unvarying nature of things outside ourselves. But this is leading us too deep into the troubled waters of epistemology—that branch of philosophy which deals with the genesis and methods of knowledge. What every one of us can appreciate is the fact that faith is not unlike science in being an hypothesis, or, as it was called in the last chapter, a point of view, a philosophy of life, a set of interpretative principles. Not only is it an hypothesis; it is a working hypothesis. That is, faith is persuasive enough to induce us to cast in our lot with it. It is venture.

Well, immortality is a thing to be *faithed*, not something to be proved or disproved. During our stay in the flesh it cannot be experienced, nor can its circumstances even be imagined in detail. It can only be conceived in the most general terms. Not only have mankind generally postulated it, but they have felt that it *must* be postulated; otherwise the picture would be incomplete. If the world of values idealized in the

Kingdom is ever to undergo complete realization in an individual soul, immortality seems a necessity.*

What of Spiritualism?

Many people, I imagine, are bothered by the question whether spiritualism may not offer sound proof of a future life. A moment ago we said that since immortality is outside the realm of possible experience, no means of proof can be expected with respect to it. But, someone may insist, immortality is precisely what spiritualism does undertake to prove. The theory underlying it may be concisely stated in the following six propositions, worded with reference to the accompanying diagram:



At death the spirit of the dead passes to the "other side";

A relative or friend of the deceased may as a sitter (S) in a spiritualistic seance, communicate through a medium (M) with the departed spirit (D);

M falls into a trance to get in touch with a "control" (C), presumably a spirit medium on the other side;

C can call up the departed (D), and communication may be relayed back and forth from S to D through M and C;

C may either tap or rap out the messages from

* Any reader interested in speculative discussion concerning immortality, its scientific possibilities, its moral and spiritual desirability, and concerning salvation and damnation, will receive both pleasure and profit from reading the last chapter of *A Student's Philosophy of Religion* by W. K. Wright.

D in terms of a code agreed upon; or C may take possession of the hand or the tongue of M, in which case the message is delivered through automatic writing or talking by M;

Test messages from D to S—information which M is not supposed to possess—is the “proof” that D is still alive and able to remember what transpired in life and to hold communication still by means of his old, habitual language symbols.

A good many years ago—seventeen to be exact—Amy E. Tanner, at that time a graduate student in Clark University, wrote a book called *Studies in Spiritism*, which contained a report of a series of experiments with a noted medium, Mrs. Piper, carried on by Miss Tanner herself and Dr. G. Stanley Hall, the eminent psychologist. As far as I know, no more authoritative or just criticism of mediumistic phenomena has been written than this one. Every person has an inalienable right to form an opinion of his own regarding this complicated and much misunderstood business of spiritualism, and anyone interested in knowing in detail what the professional psychologists think about it will do well to read the above book. For a summary of the present position of psychologists, we may turn to C. R. Griffith, of the University of Illinois. He points out that one of the crucial problems involved in any critical appraisal of spiritualism is telepathy. For if it were demonstrated that telepathy as a means of communication between two normal minds is a fact, then a presumption in favor of spiritualistic messages would be much strengthened. But the very opposite is true. Here are his last two sentences: “The laboratory has been a faithful servant, and there is no reason

to reject it at this time. So far, its conclusions regarding these problems have been negative."

This means that modern psychological science still knows no way to prove immortality. Spiritualism stands discredited as a scientific method and theory, and we are thrown back upon the proposition that immortality is a venture of faith and not demonstrable.

Some Implications

But if this view of immortality as an achievement is somewhere near the truth, what becomes of the little child that dies before it reaches self-conscious maturity? And what of the idiot and the defective, who lack the ability ever to develop a personality, no matter how much time be granted them? And what of those mentally diseased to the extent that their personalities have undergone division and disintegration? And what happens to plain ordinary "sinners," the socially and morally rotten?

These are all fair questions and deserve serious treatment. The stand a person takes concerning them will necessarily be determined by the attitudes and predispositions which he brings to their consideration. Two very different sets of answers may be given, depending upon whether one prefers to be rigorously scientific or warmly human.

If it is a biologist who has the floor he might point out how prodigal nature is of her offspring. He might remind us that fish spawn eggs by millions and many a flower produces thousands of seeds, to circumvent a hostile environment that makes the maturing of more than a tiny fraction of those eggs and seeds impossible. He would approve of the old Calvinist and his doctrine of election; that is, he also would maintain that some

individuals fate arbitrarily elects to save, while others it abandons to destruction. At any rate, a biologist would insist that not every child that is born into the world has sufficient innate capacity to develop into a mature personality; and that great numbers of those who may have the hereditary capacities necessary for personality are not so fortunate as to be favored with an environment conducive to the emergence of personality. Then there are plain weaklings, who have the ability but lack the initiative and the moral drive needed to achieve a soul. Our biologist would conclude that if personality be the main requirement, those who by reason of youth or inherent incapacities are lacking in this respect have no more title to everlasting life than have the flowers of the field—the future holds nothing more for them than just this present span of life. He would be likely to urge that it is no use to be sentimental; since soul denotes a self-conscious life holding a past, present, and future within its embrace, those members of the species that have not climbed to this height have, therefore, no claim on immortality. But as by the same token they cannot bring this fact home to their imaginations, it is certainly no hardship to them, and why should it worry anyone else?

The same fate, our biologist would go on to say, awaits the mentally sick or insane. In their cases personality has disintegrated, crumbled, fallen apart, and disappeared, for personality is like a fortune—after it has once been achieved it can be dissipated. Since the soul dwells on the self-conscious level of personality, it too may be “lost,” only in quite a different sense from that in which a preacher ordinarily uses the term.

However convincing, even though a bit “hard-boiled,” this may sound, it is an interpretation which

seems, on the other hand, too easy and fast and final an answer to the question. They do not wish to be sentimental either, but reason and judgment, they hold, cannot help being offended too by the harshness of a "nature" or a God that would assume responsibility for a universe arranged on this plan. The weakness in this slashing doctrine concerning the fate of undeveloped or damaged souls lies just here: it fails to take into account the unity of the race, the continuity of the stream of life running through the species of which we are all members. It might seem logical to say of an isolated Richard Roe, who was a mental defective or who died as an infant, that he was therefore a total loss. But if it is borne in mind that the human race is all of a piece owing to the germ plasm flowing streamlike through its numberless generations, then Richard Roe is not simply an isolated individual; he is an integral part of the human race. His extinction would be not merely a loss that he would have to stand himself, but a loss as well to the race of which he is a member. The teleological principle which has been at work in the universe for so long has been busy producing not only a human race, but one which in becoming human is far on the way to achieve immortality, and even the irregular and imperfect Richard, or the promising Richard cut off in infancy, must have a part in that achievement. He is of the stream of human life, and some kind of continued existence must be in store for him.

Spiritualize the Concept

Now it is for the reader to say which of these two views best fits the conception of the soul presented in these pages: the view that Richard Roe has no chance

after death, or the view that since he is a member of the human race, an immortality is in store for him which shall serve as a rehabilitation hospital. Either alternative has its difficulties. It seems fairly easy to suppose that John Doe, with his fine start and his closely time-knit life and his strongly integrated personality, can after death carry on and keep going forward from glory to glory. But it is considerably more difficult to imagine how death can reverse the previous direction in which Richard Roe was traveling, and give him a new start; or how it can remove any handicap, due to arrested development, with which he may be initiated into the beyond. And yet, looking at the goal rather than at the origin of the whole cosmic enterprise, nothing seems more sensible than to credit the teleological process with resourcefulness enough to extend its operations into the next higher region of reality which lies beyond the highest plateau of conscious life as we now know it, and in so doing conserve the intrinsic spiritual values entrusted to the stream of human life. But just how it will accomplish this part of its objective is one of the many unsolved problems of philosophy, and must probably remain so.

Another problem concerns the nature of heaven and hell. The materialist has always spoken of heaven in terms of some kind of a New Jerusalem with pearly gates, golden streets, thrones, harps, perpetual daylight, and uninterrupted leisure. Its location is "up." Hell has been pictured as a fiery pit, the scene of torture, wailing and gnashing of teeth, sulphurous fumes, and darkness broken by intermittent flashes of lurid light. Its location is "down."

But this materialistic way of picturing heaven and hell got a rough setback when Copernicus discovered

that the earth is a sphere, revolving on its axis and rotating around the sun. So long as the earth was a flat and stationary table, heaven could be thought of as overhead and hell underneath, and a whole cosmography could be definitely and satisfactorily plotted on these lines. But the moment it was known that the earth rotates and revolves, that whole cosmography collapsed. Indeed, at one time it seemed to devout believers that the whole of religion was being undermined by the astronomers, and some of the promulgators of this disturbing science were therefore burned at the stake. But scientific truth finally prevails, even when its combat is with religious dogma; and as a result, the prestige of the materialistic interpretation of heaven and hell received a permanent setback. No astronomer has ever been able to discover heaven, nor any geologist to locate hell, from which the necessary conclusion is that neither is a "place" located any "where." "Place" is a spatial concept, whereas heaven and hell are *temporal* concepts. Heaven puts in an appearance *when* certain conditions coexist; and hell *when* another set of conditions exist. In other words, both heaven and hell are spiritual states and not material locations.

The crucial question becomes, then, what constitutes the spiritual state called salvation, and what the spiritual state called damnation?

In terms of the ideas presented in this book, to be saved would mean for a person to be conscious that his life is in accord with the natural, the psychological, the moral, and the spiritual laws of the universe. To be saved would mean to be in the enjoyment of the maximum of psychosomatic health—physical, mental, moral, and spiritual. It would presuppose insight into the teleological order of the universe as expressed in

the ordinary laws of physical, mental and "spiritual hygiene." To be conscious of oneness with that teleological order, or in the language of religion with God, is to be saved.

Conversely, to be damned would mean for a person to be conscious that his life was at odds with the universe, and in a state of rebellion against the laws through which the power that makes for righteousness is working out its plans in the universe. To try to ride up to happiness over violated laws of physical health, mental growth, social justice, and moral excellence, to seek for it in a morass of sensuality, lust, fear, hate, jealousy, envy, enmity, arrogance and brute force, is hell. Nor do such people have to wait till death to experience torment enough to suit the hardest-hearted Calvinist.

This may seem to some a strictly naturalistic account of religion; it may appear to take all the distinctively religious out of religion, leaving only sheer morality. Let them take another look at the whole picture. Let them recollect that the philosophy of life which we have been endeavoring throughout to set forth spiritualizes the whole of the universe. We have adjudged fallacious any view which draws a hard and fast distinction between sacred and secular, which divorces religion from any segment of the universe. On the contrary, the whole cosmic enterprise has been pictured as a divinely planned and guided procedure. The same conviction has guided our analysis and description of that microcosmic enterprise called personality too. Under these circumstances, how can there be any cause for worry about whether God has any part in the various transactions of religion such as conversion, prayer, and so forth? Plainly, religion is a

mutual relationship between two personalities, one divine and the other human, but it is for the party of the second part to determine whether or not religion shall develop all of its potentialities.

Neither does anyone need to worry about whether he has undergone a personal religious "experience." No individual who has entered into this relationship has any doubt left on the subject. No man who has been through the experience of conversion needs to be told that something very definite happened to him. If he is telling about it in a Methodist class meeting, he is likely to say he received the "witness of the spirit," that "his sins were washed away," and that he knows he is "saved." If he is a student of philosophy, however, he is more likely to say that new and more inclusive vistas opened before his gaze, that he gained an unaccountably fresh and vigorous enthusiasm for living, that life became more significant to him, and that he settled down as a result to a long-term program of constructive social endeavor. In everyday language, he found his bearings.

XVI

WHAT IT WAS ABOUT

THERE was a man once so beset and puzzled that he decided to doubt everything. Nothing that he learned in the schools seemed indubitably certain to him. What the scientists said could not be taken as final, for they kept changing their minds; what one historian said always laid itself open to contradiction and denial by other historians; what the church stood back of was always stirring up controversies; what the state insisted upon was constantly being assailed by indignant minorities. One could not even believe half of what one saw, to say nothing of what one heard. The only thing left to do, it seemed to him, was to doubt everything down to the reality of the pen with which he was writing, the stove that warmed him, and the food he ate. Indeed, he would go the limit and doubt the reality of the hand that drove the pen, the brain that guided the hand, and the God that was supposed to be responsible for the hand and the brain. Perhaps it was all, all just a complicated and exasperating dream.

But he did find one thing which he could not doubt, namely, the doubting. Here at last was one indubitable fact, and it led inevitably to the proposition that I think (doubt), therefore I am (exist). At this point, I do not yet know what "I" am, but at least I exist. With one indubitable piece of reality in the universe to start with, the French seventeenth-century philosopher

Descartes, for he was the man to whom I refer, began to reconstruct the world he had discarded, with his own self as the corner stone. It was a great day for philosophy when this man's mind spanned the gap between the ultimate reality of his own self-conscious mind and the reality of the whole world. That it developed into a theory which we can no longer accept is beside the point. The important thing is that he hit upon a new method in philosophical thinking and the one which has characterized Occidental philosophy ever since his time. Indeed, by reason of this new approach to the problems of philosophy he has been called the father of modern philosophy. Incidentally, he managed to make room again in his mind for most of the things his doubting had so bravely and ostentatiously cast out.

As we have pursued our investigation into the nature of the soul, again and again we have run upon theories, beliefs, doctrines, which we, too, found occasion to doubt or at least to question. But we need not feel troubled over our doubting propensities, provided, of course, that we use doubt as a means and not as an end, for after all our doubts constitute the only sound test of truth. Doubting never got anyone into permanent difficulty who had the courage to think matters through, and was not content to accept a negative attitude of agnosticism or skepticism as final. So as a starting-point in our search for the soul we passed in review a number of traditions and points of view regarding its origin and nature in this questioning and critical frame of mind.

In the beginning we wanted to see what the soul of John Doe—in case he had one—was like, to discover whence it came, its relation to the rest of his organism,

and then to inquire into its destiny. Throughout we tried to bear in mind the antecedents of soul, for we have held that the validity of any picture of John Doe will be determined by its consonance with the rest of reality known to us. Moreover, we have been in search of the conditions under which souls are born and grow and thrive.

So much for the method. Whether or not it has yielded satisfactory answers to our questions the reader will have to decide.

We called a number of different individuals to the witness box—young men and women who had nearly or quite attained mental maturity, but had not yet undergone any special philosophical training. Their accounts of their views coincided, we recognized, with typical “popular” life philosophies. Conflicting and inconsistent though they were with one another, they had all alike come down to this generation as a part of its social inheritance, each tracing its origin to some thinker or school of thinkers of the past. Our present stock of ideas is largely a hodgepodge of traditions and lore handed down from generation to generation. To single out these views, to state them as logically as possible, and let them make as good a case for themselves as they could, formed part of our plan. Accordingly, we looked at the soul through the eyes of a mechanist and then of an idealist. Next we tried to see it as the fundamentalist sees it, and then as the evolutionist views it. And finally, we let the modernist picture how he envisages it. So much for our general canvass of the question from the standpoint of rational folk lore.

Then we proceeded to block out an outline of the structure of the cosmos by putting together the findings

of many kinds of scientists: the physicist, the mathematician, the biologist, the animal and human psychologist, the sociologist, the ethicist, and the theologian. This gave us our "blue-print elevation," which served also as our "stairway to the soul."

When we had thus completed our sketch of John Doe's antecedents, we turned our attention to his own psychosomatic career, tracing it through its various major episodes to its culmination in the unique reality called personality. This prepared us to note some of the inter-relationships between the individual personality of John Doe and the cosmos to which he belongs and of which he is the highest expression. Here we reached the conclusion that the soul of John Doe is one in identity with the top level of his self-conscious personality. Hence, we felt compelled to think of it as an achievement, not as a ready-made filler or essence injected from without, and that it grows as personality grows. From time to time we were able to pick out elements of those traditional beliefs and doctrines held by Harbin, Longman, and the others, and to utilize them in our synthesis. Finally, we examined some of the important implications of our own doctrine that the possession of a soul is evidence of a conquest. We inquired into the conditions under which souls grow and develop; we asked ourselves what the chances are that souls will carry on after death, whether such an extension of life would be desirable and under what conditions, and what we are to suppose happens to those individuals who do not develop personality, or lose it after it has been gained.

And now as we come to the end of the journey, it may perhaps be asked what the outcome of the whole affair is; what has been proved or disproved; what do

we know now that we did not know when we started; and what reaction this effort to think clearly about our human origin and destiny is to have upon our lives. Well, each reader will have to answer these questions for himself. To me, this enterprise of trying to visualize our human origin and destiny more clearly and see it whole has been not only interesting but tremendously vital. For what I shall do with to-day depends a vast deal upon what I think is going to come of it to-morrow, and the next day and the next. A good many people, young people included, are nowadays betting their lives that life is not worth living; or at least, that it is not for them. Whether it is worth living for anybody seems to me to depend upon what philosophy he holds; upon what system of values he espouses; upon what the attitude is with which he faces the issues of life. So this inquiry into the antecedents and destiny of the soul of John Doe, M.H.R., is of first importance, not only to him but to me, and I think to every other Member of the Human Race as well.

The query as to what we have proved or disproved, or what we now know that we did not know before we began our survey, seems to me a bit beside the mark. It has already been pointed out that matters of this kind are beyond proof or disproof.

They are ventures of faith. If a man will not make these ventures there is only one road left open to him, namely to get reëducated and learn how. If this canvass of the problem turns out to be such a course of re-education preliminary to a constructive faith for any reader, it will have yielded a double-value dividend, for its preparation has consolidated my own faith more strongly.